WebFOCUS

WebFOCUS Managed Reporting End User's Manual
Version 5 Release 2

Preface

This documentation describes the WebFOCUS Managed Reporting end user's environment, which provides easy access to the information that users need, regardless of hardware platforms, database structures, or application programs. It is intended for users that need to run and create reports.

How This Manual Is Organized

This manual includes the following chapters:

Chapter/Appendix		Contents
1	*Introducing WebFOCUS Managed Reporting*	Describes Managed Reporting and the end-user components and tools you use to run, view, create, and edit reports. Also explains how to access Managed Reporting using the Java™ applet or Dashboard interfaces.
2	*Using Dashboard*	Describes the Dashboard which automatically connects you to WebFOCUS and WebFOCUS Managed Reporting. From Dashboard you can select a domain, use the items (reports, graphs, reporting objects, or URLs) in the Domain Tree and Role Tree, view the status of a deferred report, search domains, access reporting tools such as Report Assistant, Graph Assistant, ReportCaster, and Library, personalize content blocks, and much more.
3	*Creating a Content Block*	Describes how to create content blocks, which display when you open the Dashboard. Content blocks can contain launched reports, links to reports, or links to Internet resources.
4	*Using the Deferred Report Status Interface*	Describes the functionality of the Deferred Report Status Interface. Provides specific procedures to guide you through viewing, saving and deleting reports, deleting deferred reports that are being processed but are not yet complete, as well as reviewing parameters for reports containing amper variables.
5	*Creating a Report With Report Assistant*	Describes how to use the HTML Report Assistant to create tabular reports.

Chapter/Appendix		**Contents**
6	*Creating a Graph With Graph Assistant*	Describes how to use the HTML Graph Assistant to create graphical reports.
7	*Using OLAP Analysis*	Presents the terminology and benefits of using Online Analytical Processing (OLAP). Describes how to customize reports with the OLAP selections panel and the OLAP Control Panel.
8	*Manipulating Data in an OLAP-enabled Report*	Describes how to sort and apply various selection criteria (to restrict your data) as well as how to troubleshoot an OLAP-enabled report.
9	*Visualizing Trends in Reports*	Describes how to insert visual representations (in the form of bar graphs) of selected data directly into your report output.
10	*Using the WebFOCUS Viewer*	Describes how to use the WebFOCUS Viewer to view long reports.
11	*Using PDA Sync*	Describes PDA Sync requirements, how to subscribe to a channel, and how to view Standard Reports and Deferred Reports on your PDA.
12	*Using Two-Way Email*	Explains the steps that a user performs to enable the Two-Way Email capability. Also describes what a template looks like, and how to use one to request a report. Addresses the alert response for those sites that have licensed and installed both ReportCaster and Two-Way Email.
13	*Using Java Applet Managed Reporting*	Describes Java-based Managed Reporting and provides procedures for running reports and creating your own reports using blocks of data your Administrator has created for you.
14	*Using HTML-based Managed Reporting*	Describes the structure of HTML-based Managed Reporting and how you access it and navigate through it. Also provides the procedures you use to run Standard and Static Reports.

Documentation Conventions

The following conventions apply throughout this manual:

Convention	Description
`THIS TYPEFACE` or `this typeface`	Denotes syntax that you must enter exactly as shown.
`this typeface`	Represents a placeholder (or variable) in syntax for a value that you or the system must supply.
`underscore`	Indicates a default setting.
this typeface	Represents a placeholder (or variable) in a text paragraph, a cross-reference, or an important term.
this typeface	Highlights a file name or command in a text paragraph that must be lowercase.
this typeface	Indicates a button, menu item, or dialog box option you can click or select.
Key + Key	Indicates keys that you must press simultaneously.
`{   }`	Indicates two or three choices; type one of them, not the braces.
`[   ]`	Indicates a group of optional parameters. None are required, but you may select one of them. Type only the parameter in the brackets, not the brackets.
`|`	Separates mutually exclusive choices in syntax. Type one of them, not the symbol.
`...`	Indicates that you can enter a parameter multiple times. Type only the parameter, not the ellipsis points (…).
`.` `.` `.`	Indicates that there are (or could be) intervening or additional commands.

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Customer Support

Do you have questions about WebFOCUS?

Call Information Builders Customer Support Service (CSS) at (800) 736-6130 or
(212) 736-6130. Customer Support Consultants are available Monday through Friday
between 8:00 a.m. and 8:00 p.m. EST to address all your WebFOCUS questions. Information
Builders consultants can also give you general guidance regarding product capabilities and
documentation. Please be ready to provide your six-digit site code number (*xxxx.xx*) when
you call.

You can also access support services electronically, 24 hours a day, with InfoResponse
Online. InfoResponse Online is accessible through our World Wide Web site, http://
www.informationbuilders.com. It connects you to the tracking system and known-problem
database at the Information Builders support center. Registered users can open, update,
and view the status of cases in the tracking system and read descriptions of reported
software issues. New users can register immediately for this service. The technical support
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and answers to frequently asked questions.

To learn about the full range of available support services, ask your Information Builders
representative about InfoResponse Online, or call (800) 969-INFO.

Information You Should Have

To help our consultants answer your questions most effectively, be ready to provide the
following information when you call:

- Your six-digit site code number (*xxxx.xx*).
- Your WebFOCUS configuration:
    - The front-end you are using, including vendor and release.
    - The communications protocol (for example, TCP/IP or HLLAPI), including vendor
      and release.
    - The software release.
    - The server you are accessing, including release (for example, 5.2).

- The stored procedure (preferably with line numbers) or FOCUS commands being used in server access.

- The name of the Master File and Access File.

- The exact nature of the problem:

    - Are the results or the format incorrect? Are the text or calculations missing or misplaced?

    - The error message and return code, if applicable.

    - Is this related to any other problem?

- Has the procedure or query ever worked in its present form? Has it been changed recently? How often does the problem occur?

- What release of the operating system are you using? Has it, WebFOCUS, your security system, communications protocol, or front-end software changed?

- Is this problem reproducible? If so, how?

- Have you tried to reproduce your problem in the simplest form possible? For example, if you are having problems joining two data sources, have you tried executing a query containing the code to access a single data source?

- Do you have a trace file?

- How is the problem affecting your business? Is it halting development or production? Do you just have questions about functionality or documentation?

User Feedback

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CHAPTER 1

Introducing WebFOCUS Managed Reporting

Topics:

- WebFOCUS Managed Reporting Concepts
- WebFOCUS Managed Reporting Features
- WebFOCUS Managed Reporting Interface

WebFOCUS is a complete, Web-ready, enterprise data access and reporting system, which takes advantage of the low-cost, low-maintenance, and wide distribution capabilities of the World Wide Web and internal corporate Web sites.

WebFOCUS enables application developers and Web designers to create powerful EIS and decision-support applications that deliver easy access to the information that users need, regardless of hardware platforms, data source structures, or application programs. Developers can create sophisticated Web pages that enable end users to view static reports, to run dynamic reports, and to create parameterized queries for individual requests.

WebFOCUS Business Intelligence Dashboard allows you to create a customized view of WebFOCUS. When you connect to Dashboard you are also connecting to WebFOCUS Managed Reporting.

WebFOCUS Managed Reporting provides a streamlined reporting environment that virtually eliminates the complexities of today's corporate data. Your administrator defines the interface that you use to access your company's data.

This manual describes the end-user components and tools you use to run, view, create, and edit reports. Use this documentation to learn about the structure and the capabilities of each component and tool.

WebFOCUS Managed Reporting Concepts

Managed Reporting includes the following components:

Domains. Domains are the highest level of organization. Domains provide data on a particular topic (such as sales, inventory, or personnel). The data is stored in different forms in the following domain components: pre-defined reports (Standard Reports), data sources used to create reports (Reporting Objects), and reports created and saved by users (My Reports or Shared Reports).

Standard Reports. A Standard Report is a pre-defined procedure that your Administrator creates and stores in a group folder or subgroup folder. You use Standard Reports to retrieve data that changes on a regular basis, for example, monthly inventory reports or weekly sales reports. Each time you run a Standard Report the output reflects the most current data, while the format of the report remains constant.

Reporting Objects. A Reporting Object is a tailored view of a set of data that your Administrator creates and saves to a group folder. You use the data contained in a Reporting Object to create personal reports quickly and in compliance with your company's reporting rules and guidelines.

My Reports. A My Report is a personal report you save while working in a domain. Once you access a Reporting Object and create a report, you can save the report as a My Report. Once saved, you can run or edit these reports. No other user has access to your reports.

Shared Reports. A Shared Report is a My Report that another user has prepared and saved with the Shared Report capability. You can run a Shared Report from the Shared Reports tab. You can also copy it to your My Reports tab and then modify it without affecting the original report.

Static Reports. A Static Report is a type of Standard Report in which the output never changes. Unlike a regular Standard Report that always reflects current data, a Static Report delivers a snapshot of data from a specific time. For example, a Static Report may be a Web page that contains a report.

Help System. Each domain may also contain a customized help system that you can access for specific information about your implementation of Managed Reporting.

WebFOCUS Managed Reporting Features

Managed Reporting offers you a selection of reporting tools that you use to create and edit reports, manipulate data in an existing report, submit a report for background processing, and view a report.

Report Assistant. Report Assistant is an HTML-based tool that you use to create tabular reports. From Report Assistant you select the data that constitute your report, create new data from existing data, apply screening conditions to the data, as well as format and style your report.

Graph Assistant. The Graph Assistant is an HTML-based tool that guides you step-by-step through the creation of a graph. The Graph Assistant enables you to create and style your graphs.

Note: Your Administrator may have configured your site to use the applet versions of Report Assistant and Graph Assistant. For information on the applet versions of Report Assistant and Graph Assistant, see the online help.

Graph Editor. The Graph Editor enables you to change the style or formatting of graph output after it appears. The Graph Editor may not be available with the graph that you run. Your Administrator will decide which graphs you can edit.

OLAP Selections Panel and OLAP Control Panel. The OLAP selections panel and OLAP Control Panel (OLAP stands for Online Analytical Processing) enable you to view and manipulate data in your report. With these tools you can make changes "on the fly" and immediately see the output that results from your selections. OLAP offers you many analytical features to help you interpret the data in your report.

ReportCaster. ReportCaster is a tool that allows you to manage and schedule the distribution of your reports. Using ReportCaster you can distribute your reports at scheduled intervals via e-mail, ftp, or to a printer.

WebFOCUS Viewer. The WebFOCUS Viewer displays report output one page at a time. This tool is useful for reports that contain a large number of pages. Only the first page is sent from the Web server to your browser. The WebFOCUS Viewer enables you to page through the output, as well as search for a specific string of text.

Deferred Receipt. Deferred Receipt allows you to submit a report for background processing. Once you submit a report, you can continue working in Managed Reporting while WebFOCUS processes the report. You then use the Deferred Report Status Interface to view the report output and save the report as a My Report.

WebFOCUS Managed Reporting Interface

The following options are available for accessing Managed Reporting:

- WebFOCUS Business Intelligence Dashboard

- Java™ applet environment

WebFOCUS Business Intelligence Dashboard

The Dashboard interface is ideal for users who quickly need to run Standard Reports. Check your WebFOCUS Installation manual for information about browser compatibility.

Dashboard offers you the ability to:

- Personalize the content displayed in your Dashboard view.

- Advanced search within domains.

- Access reporting tools such as Report Assistant, Graph Assistant, ReportCaster, and Library.

- Dynamically access non-WebFOCUS documents.

When you connect to Dashboard you are also connecting to Managed Reporting, which means all of the Standard Reports and Reporting Objects that are available to you in Managed Reporting will also be available in Dashboard.

Managed Reporting is accessed by the Dashboard interface. The interface is a customizable HTML-based front-end that allows you to:

- Run Standard Reports and My Reports, either immediately or in deferred mode.

- Create reports and graphs using Reporting Objects and Report Assistant or Graph Assistant.

- Save the reports and graphs as My Reports.

- Share reports with other users.

- Edit My Reports.

- Access the OLAP selections panel and OLAP Control Panel to manipulate the data in a report.

- View reports with the WebFOCUS Viewer.

The following additional features are available depending on whether your site is licensed and your Administrator has granted you the capability to use these features:

- Schedule My Reports (ReportCaster).

- Sync Standard Reports to a Personal Digital Assistant (PDA Sync).

- Respond to a Two-Way Email from any e-mail capable device, including pagers, laptops, desktops, and PDAs (Two-Way Email).

Java Applets

Java-based Managed is an alternative to the Dashboard. For more information, see Chapter 13, *Using Java Applet Managed Reporting*.

Using Dashboard

Topics:

- Opening Dashboard
- Personalizing Your Dashboard
- Required Browser Settings
- Recommended Browser Settings
- Dashboard Layout
- Selecting a Domain
- Using Domain Tree Items
- Using Role Trees
- Viewing Content Blocks
- Running Deferred Reports
- Dynamic Server Signon Feature
- Searching Domains
- Creating a Favorites List
- Setting User Options

When you enter WebFOCUS Business Intelligence Dashboard you are automatically connected to WebFOCUS and WebFOCUS Managed Reporting.

From Dashboard you can:

- Select a domain.
- Use the items (reports, graphs, reporting objects, or URLs) in the Domain Tree and Role Tree.
- View the status of a deferred report.
- Search domains.
- Access reporting tools such as Report Assistant, Graph Assistant, ReportCaster, and Library.
- Personalize content blocks.
- And much more.

Note: Depending on how your view of Dashboard has been set up, some features may not be available.

Opening Dashboard

There are several views in the Dashboard environment:

- **Public.** A public view is accessible to public users and cannot be personalized. Public users have execute-only access; they cannot save report requests or report output to a domain. See *How to Open a Public or Group View* on page 2-2.

- **Group.** A group view is accessible to users with a valid Managed Reporting user ID and password. The user must be a member of the group to gain access to the view. Group views cannot be personalized by users.

- **Private.** The private view is accessible to users with a valid Managed Reporting user ID and password. From this view, you can add to or edit the content blocks your Administrator has set up. See *How to Login to a Personalized View of Dashboard* on page 2-3.

When you login to Dashboard, a dual logon page appears. Enter your Managed Reporting user ID and password, as well as your WebFOCUS Reporting Server user ID and password, to login to Dashboard.

Procedure **How to Open a Public or Group View**

1. Enter the following URL in your browser to open the WebFOCUS Business Intelligence Dashboard index page

   `http://`*webserver*`/ibi_apps/bid`

   or

   If you know the name of the page you want to go to enter

   For public views: `http://`*webserver*`/ibi_apps/bid/`*viewname*`_public`

   For group views: `http://`*webserver*`/ibi_apps/bid/`*viewname*`_gbv`

   where:

   webserver

   Indicates the name of the Web server that runs Dashboard.

   viewname

   Is the name of the view given to you by your administrator.

   `public`

   Indicates a public view.

   `gbv`

   Indicates a group view.

2. Click *Public Views* or *Group Views*.

3. Click the public or group view you want to view.

How to Login to a Personalized View of Dashboard

1. From a Dashboard public view, click *Login* or

   Enter the following URL in your Web browser

   `http://webserver/ibi_apps/bid/login`

   where:

   webserver
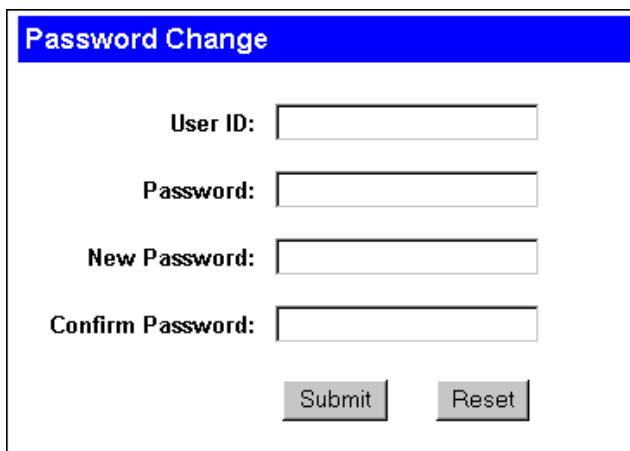
   Indicates the name of the Web server that runs Dashboard.

2. Enter a valid Managed Reporting user ID and password.

3. Enter a valid WebFOCUS Server user ID and password, if necessary.

4. Click *Submit*. Your personalized view of Dashboard opens.

Procedure **How to Change Your Password**

1. Click *Change Password* on the Dashboard logon page.

   The Password Change dialog box opens:

2. Type your user ID in the User ID input box.

3. Type your current password in the Password input box.

4. Type your new password in the New Password input box.

5. Retype your new password in the Confirm Password input box.

6. Click *Submit*. A confirmation window displays a message indicating that your password was successfully changed.

   Note: If you change your password in Dashboard, it will also change for Managed Reporting.

Personalizing Your Dashboard

You can personalize the content blocks that display when you open a private view of Dashboard. Content blocks can contain launched reports, links to reports, or links to Internet resources. The following are the types of content blocks:

- **Launch blocks** contain only one item, which is launched when you open Dashboard.

- **List blocks** can contain many items and display a list of links to reports or to Internet resources.

- **Folder blocks** are similar to link blocks and contain the entire contents of a folder.

- **Output blocks** may or may not contain information when Dashboard is launched. When you run a report or access an Internet resource, the output block will refresh and display the new contents rather than open a separate browser window.

For details, see Chapter 3, *Creating a Content Block*.

Required Browser Settings

The following Internet Explorer browser settings are required for use with Dashboard:

- Temporary Internet files option to check for newer versions of stored pages with every visit to the page.

- Advanced browsing options to reuse windows for launching shortcuts.

Procedure **How to Set the Temporary Internet Files Option**

1. From the Tools menu in Internet Explorer, select *Internet Options*. The Internet Options dialog box opens.

2. Click the *General* tab.

3. Click *Settings* under Temporary Internet files. The Settings dialog box opens.

4. Click the *Every visit to the page* radio button.

5. Click *OK* to clear the Settings dialog box.

6. Click *OK* to clear the Internet Options dialog box.

Procedure **How to Set Advanced Browsing Options**

1. From the Tools menu in Internet Explorer, select *Internet Options*. The Internet Options dialog box opens.

2. Click the *Advanced* tab.

3. Under Browsing, deselect *Reuse windows for launching shortcuts*.

4. Click *Apply*.

5. Click *OK*.

Recommended Browser Settings

We recommend that you change the following Internet Explorer browser settings for use with Dashboard:

- Browser colors to Windows colors.

- Web page font to Arial.

- Browser text size to medium.

In addition, we recommend you override Web page formatting and Style Sheets.

Procedure **How to Change Your Browser Colors**

1. From the Tools menu in Internet Explorer, select *Internet Options*. The Internet Options dialog box opens.

2. Click the *General* tab.

3. Click *Colors*. The Colors dialog box opens.

4. Click the *Use Windows colors* check box.

   or

   Deselect the *Use Windows colors* check box and select:

   - Black for the text color.

   - White for the background color.

5. Click *OK* to clear the Colors dialog box.

6. Click *OK* to clear the Internet Options dialog box.

Procedure **How to Change Your Browser Font**

1. From the Tools menu in Internet Explorer, select *Internet Options*. The Internet Options dialog box opens.

2. Click the *General* tab.

3. Click *Fonts*. The Fonts dialog box opens.

4. Select *Arial* for the Web page font

5. Click *OK* to clear the Fonts dialog box.

6. Click *OK* to clear the Internet Options dialog box.

Procedure **How to Change the Text Size in Your Browser**

1. From the View menu in Internet Explorer, select *Text size*.

2. From the pop-up menu, select *Medium*.

Procedure **How to Override Web Page Formatting and Style Sheets**

1. From the Tools menu in Internet Explorer, select *Internet Options*. The Internet Options dialog box opens.

2. Click the *General* tab.

3. Click *Accessibility*. The Accessibility dialog box opens.

4. Deselect all of the options.

5. Click *OK* to clear the Accessibility dialog box.

6. Click *OK* to clear the Internet Options dialog box.

Dashboard Layout

Dashboard contains the following areas:

- **Banner.** Contains links that allow you to access various functionalities of Dashboard.

- **Content pages.** Contain the content blocks that were set up by you or your Administrator.

- **Domain Tree.** Contains the list of reports, reporting objects, and Internet links you can access. You can expand the Domain Tree to view the entire name of an item by dragging the control bar that separates the Domain Tree from the content area.

- **Role Tree.** Contains lists of links to items (reports, graphs, launch pages, and URLs) in the User Groups to which you belong. You can expand the Role Tree to view the entire name of an item by dragging the control bar that separates the Role Tree from the content area.

- **Toolbars.** Toolbars are set up by your administrator and can contain links to Web sites, other tools, applications, and documents. Links accessed from a toolbar open in separate browser window.

Depending on how your Administrator has set up your view of Dashboard, the banner, content blocks, Domain Tree, Role Tree, and toolbars may display differently. The items may be displayed in different locations, and the Domain Tree, Role Tree, and toolbars may be hidden. The Domain Tree, Role Tree, and content blocks may display with scrolling buttons or scroll bars.

In the following example the:

- Banner is on the top right of the window

- Content blocks are on the bottom right of the window,

- Domain Tree is on the left side of the window.

Scroll bars display for the launch block and scroll buttons display in the control bar for the folder block. If your view of Dashboard contains a Role Tree, it displays in the same area as the Domain Tree. You can toggle between the Domain Tree and Role Tree by clicking the button in the Domain Tree/Role Tree title bar.

Selecting a Domain

At the top of the Domain Tree is a drop-down menu that contains the names of all the domains you can access. Depending on how your Administrator has set up your view of Dashboard, you may not have access to the Domain Tree.

After you have selected a domain, a list of the domain's folders and objects (populated from the Managed Reporting Domain) display in a tree structure below the Domain Tree. You can access any of the items contained in the domain. When the contents of a Domain Tree change, such as when a My Report is added, use the Refresh button in the control bar to update the Domain Tree contents.
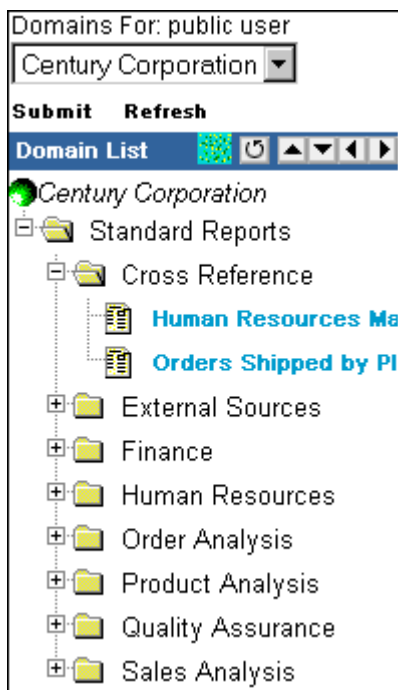
The icons located next to each item represent the item type. Item types include:

Icon	Identifies...
	Reports. Reports and reporting objects in a domain.
	Internet links. Web pages and reports run from launch pages.

Procedure **How to Select a Domain**

1. From Dashboard, click the arrow in the Domain Tree drop-down list and highlight the desired domain.

2. Click *Submit*. The Domain Tree refreshes.

    To expand a domain folder and display its contents, click the plus sign (+) located next to the folder icon.

    To collapse a folder and hide its contents, click the minus sign (-) located next to the folder icon.

Using Domain Tree Items

A domain can contain reports, reporting objects, and Internet links. These items are located in the Standard Reports, My Reports, Shared Reports, and Reporting Objects folders of a domain.

When you select an item from one of these folders, a menu displays which allows you to select one of the options available for that item type. Each item type has different options. The option(s) for:

*   **Reports** (identified by the Report icon) include Run, Run Deferred, Add to Favorites, and Properties. The Run function will not display if the report has been defined by your Administrator as a deferred-only report.

    Note: When viewing the detail portion of a drill-down report, use the Back button in your browser to return to the original report.

*   **My Reports** (identified by the Report icon) include Run, Run Deferred, Report Assistant, Graph Assistant, ReportCaster, Add to Favorites, and Properties.

    From the menu for a report in the My Reports folder, you also have the option to delete the report. If the report is the only item in the folder, the folder is also deleted when you delete the report. When you delete a report, the Domain Tree refreshes and the domain tree collapses.

*   **Reporting Objects** (located in the Reporting Objects folder and identified by the Report icon) include Report Assistant, Graph Assistant, and Properties. Any reports created from a Reporting Object are saved in the My Reports folder.

*   **Internet links** (identified by the Internet Link icon) include Go To, Add to Favorites, and Properties.

Note:

•   If you are running very large reports, you may need to increase the virtual memory on your machine. See your System Administrator for details.

•   A menu will not display if you are accessing a public view of Dashboard. Only the default action is allowed for the list items in a public view.
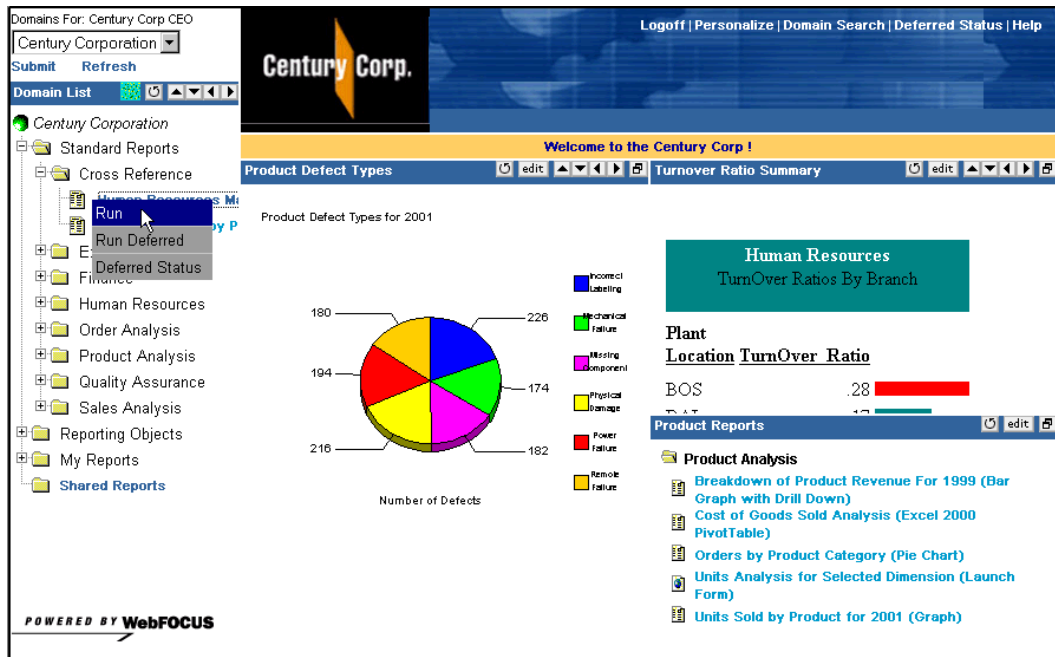
Using Role Trees

Role Trees contain items (reports, graphs, launch pages, and URLs) that have been associated to the User Groups to which you belong. For example, if you belong to the Public, Century Corporation and Sales Support groups, you will have access to the items in the respective Role Trees (as seen below).

Items in a Role Tree have the same functionality as items in a Domain Tree. When you select an item in a Role Tree, you have the options Run, Run Deferred, Add to Favorites, and Properties for reports, and Go To, Add to Favorites, and Properties for Internet resources.
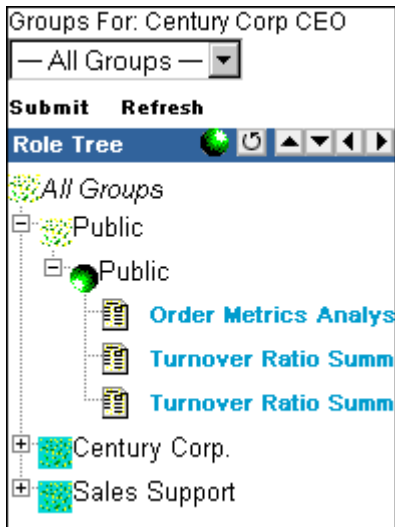
Procedure **How to Select a Role Tree**

1. From Dashboard, click the arrow in the Groups For drop-down list and highlight the desired Role Tree.

   You can view all Role Trees associated with your group by selecting *All Groups* from the list.

2. Click *Submit*. The Role Tree refreshes.

   To expand a domain folder and display its contents, click the plus sign (+) located next to the folder icon.

   To collapse a folder and hide its contents, click the minus sign (-) located next to the folder icon.

Viewing Content Blocks

When viewing content in Dashboard, the following options and information are available:

- **Content page name.** If your Dashboard view contains multiple content pages, tabs with the content page name appear along the top of the content area.

- **Block name.** Displays on the left side of the content block control bar.

- **Refresh button.** Refreshes the contents of the block.

- **Edit button.** Displays the Edit window in the View Builder. This allows you to change the block type, the contents of the block, and the block name. For details, see Chapter 3, *Creating a Content Block*.

- **Scrolling.** Click any of the arrows in the content block control bar to scroll through a report or a link list. If scrolling arrows do not display, you can browse the block using the scroll bar.

- **Maximize button.** Allows you to maximize the content block. When you maximize a content block, it displays in a new browser window.

Viewing List and Folder Block Items

List and folder block items display as links in Dashboard. To view a list or folder block item, click the link or select the Run or Go To option from the menu. The output displays in a separate browser window unless an Output block window has been created in the content page you are viewing. If an Output block has been created, the output displays there.

When a list or folder block displays, an icon precedes each report as follows:

Icon	Displays for...
	Hyperlinks and launch forms.
	Procedures that do not require input or launch forms and for procedures that are designated as "Run Only as a Deferred Report."
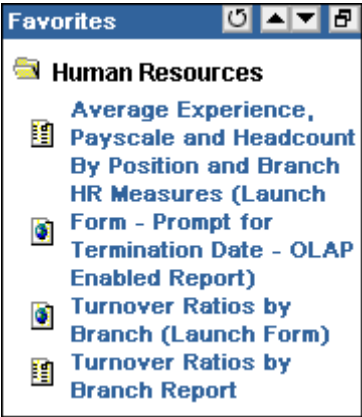
Note: The menu that displays when you right-click an item is not valid for items in list or folder blocks.

Running Deferred Reports

A deferred report is a report that you can run as a background task, while continuing other work. You can view information about a deferred report in the Deferred Report Status interface window. The window indicates the time the report was submitted and if the report was completed or not, and also gives you the options Delete, View, Save, and Parameters. For additional information on deferred reports, see Chapter 4, *Using the Deferred Report Status Interface*.

Any output from a deferred report can be saved. When you save output from a deferred report, it will be saved in the My Reports folder of the respective domain.

Note: When accessing a public view of Dashboard, the deferred reports option is not available.

Procedure **How to Run a Deferred Report**

1. Select an item in the Domain Tree, Role Tree, Folder or List block.

2. Select *Run Deferred* from the menu. A notification window displays indicating that the report was successfully submitted for deferred execution.
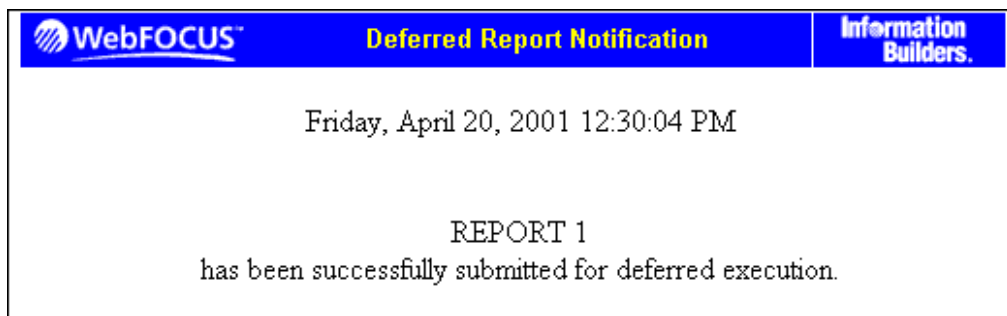
3. To view the status of the deferred report, click *Deferred Status* from the Dashboard banner. The Deferred Report Status interface window opens.

For additional information on deferred reports, see Chapter 4, *Using the Deferred Report Status Interface.*

Dynamic Server Signon Feature

Before the Report Assistant opens, you may be prompted for credentials, depending on how your Managed Reporting environment was configured. If you have questions, contact your administrator.

Once you enter these credentials, the system remembers them for the duration of your browswer session, or the duration set by your WebFOCUS administrator. These credentials are not stored on your computer, and are not encrypted in the WebFOCUS cookie. Your browser must be configured to accept cookies in this case.

Searching Domains

The domain search allows you to perform specific searches of the domains available to you. You can perform basic and advanced searches, and combine the available search options.

You can add items from a domain search to your favorites list directly from the search results window. You can also use domain search when creating content blocks to quickly find items.

Basic Search

Basic searches allow you to search for items within a domain. Search options include:

- **Select a domain.** Select the domain you want to search. To search across all available domains, select the All Domains item.

- **Enter search query.** Enter a text string for which you want to search. The search looks for matching values within the title of the domain. If you leave this value blank, all available items from the selected domain will be returned to the output panel on the right side of the window.

- **Search option.** Select from the following:

  - **All** searches for the text string anywhere within the titles.

  - **Exact match** searches for a title that exactly matches the string entered.

  - **Starts with** searches for a title that starts with the search string.

  - **Ends with** searches for a title that ends with the search string.

- **Search preference.** Select from the following:

  - **Return first item only.** Returns only the first matching value.

  - **Return every item.** Returns all matching values.

  - **Items per page.** Allows you to restrict the number of returns displayed on one browser page. The default number of hits is 20.

- **Sort preference.** Sort results by title, type, or date the item was last updated. You can also sort in ascending (low-to-high) or descending (high-to-low) order.

- **Look in.** Specify the type of folder you want to search in. This option is not available when accessing a public view of Dashboard. Select from:

  - **Standard Reports.** Searches for the value only in the Standard Reports folder.

  - **Reporting Objects.** Searches for the value only in the Reporting Objects folder.

  - **My Reports.** Searches for the value only in the My Reports folder belonging to the user performing the search.

  - **Shared Reports.** Searches for the value only in the Shared Reports folder.

  - **All.** Does not restrict the type of domain folder to search.

Advanced Search

Advanced searches allow you to specify additional search criteria. You can specify the following in an advanced search (in addition to all of the basic search options):

- **Look for.** Restricts the search to a particular file type. You may select more than one file type. Select from:

  - **Report.** Searches only for reports.

  - **Web Address.** Searches only for links.

  - **Web Page.** Searches only HTML pages.

  - **Folder.** Searches only for folders.

  - **All.** Does not restrict the type of domain object to search.

- **Date Modified.** Enables you to search for items in a specific date range. Select from:

  - **All.** Searches without date restrictions.

  - **During the previous (number of) days.** Searches only those reports that were created or modified in the past number of days you specify.

  - **During the previous (number of) months.** Searches only those reports that were created or modified in the past number of months you specify.

  - **Between (date 1) and (date 2).** Searches only those reports that were created or modified between the set of dates you specify.

The format of the date and time shown in the Domain Search Results window, and in the Modified since panel, are based on your system setting.

Procedure   **How to Search a Domain**

1. From Dashboard, click *Domain Search*. The search window displays in a separate browser window.

2. If necessary, click *Advanced Search* for more options.

3. Select the domain you wish to search from the drop-down list, or select *All Domains*.

4. Enter the text string you wish to search for in the text box.

5. Click the radio buttons and check boxes next to the desired search options. For details on basic search options, see *Basic Search* on page 2-16. For details on advanced search options, see *Advanced Search* on page 2-18.

6. Click *Search* to search your domains or *Reset* to reset all of the search options to the default values.

Search results are returned in a list block on the right side of the window. The list contains the item title, item type, the date, and the path information. You can sort the results using the arrows in the title bars. You can add items from the search results window directly to your favorites list.
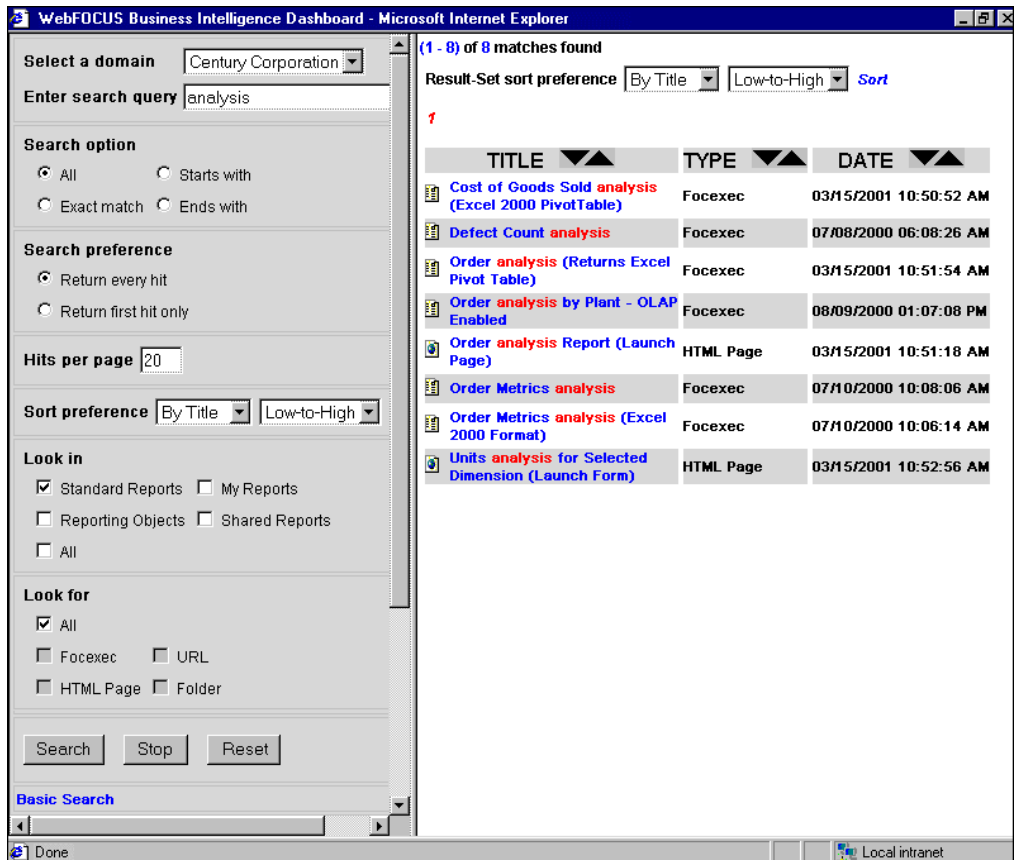
7. Close the window to exit the search.

Creating a Favorites List

You can create a Favorite Reports list when using Dashboard. This list can contain any item types except reporting objects. The Favorite Reports list is easily accessible from the Favorites link in the banner.

In addition to your favorite reports list, a most recently used reports list is automatically generated when you use Dashboard. By default, the recent report list holds 10 reports. You can change this number from the Options link. You can access the recent reports list from the Recent link in the banner.

You can add to the Favorite Reports list from:

- A Domain Tree, Role Tree, list block, or folder block. When you click an item in any of these, select Add to Favorites from the pop-up menu.

- Domain Search. When you click an item in the search results, select Add to Favorites from the pop-up menu.

You can clear all items in your Favorite Reports and from the Recent list by clicking Remove All from the Favorite Reports or Recent dialog box. To remove an individual item, right-click the item in your Favorite Reports or Recent list and select Remove.

Setting User Options

You can set personal options for your Dashboard using the Options link in the banner. When you click this link, the Options dialog box opens enabling you to make many choices such as which tool type you would like to use for Report and Graph Assistant (HTML or Java applet), the default display folder for a domain, and many more.

Setting user options is not available for Public or Group views.

Reference **Options Dialog Box**

Report Assistant tool type

Select to use the HTML or Java applet Report Assistant.

Graph Assistant tool type

Select to use the HTML or Java applet Graph Assistant.

Reuse Report Execution window

If you are not using an Output block, a new browser window opens when a report is executed. If you select Yes for this option, additional reports will open in and reuse any existing browser windows from previous reports.

Maximum number of requests in Recent list

Select the maximum number of requests to keep in your Recent list. Select between 1 and 10 requests.

Popup menu display

Select to display the popup menu when you click on an item or when you hover over an item. If you select the On hover option, when you click an item the default action for that item is performed. The default action is the first action on the menu.

Select the folders to be loaded when opening a domain

The contents of the selected folders will be retrieved when the domain is selected.

Load Shared user's items when Shared reports folder is loaded

Retrieves all available Shared reports when the Shared reports folder is retrieved. Alternatively, only a list of Shared users will be retrieved.

Select a folder to be expanded when opening a domain

The selected folder will be opened and expanded, displaying the subfolders.

Creating a Content Block

Topics:

- Content Window
- Creating Content Pages
- Adding a Content Block
- Removing a Content Block
- Editing a Content Block
- Selecting Content Layout
- Exiting the Content Window

Content blocks display when you open the WebFOCUS Business Intelligence Dashboard. Content blocks can contain launched reports, links to reports, or links to Internet resources. The following are types of content blocks:

- Launch blocks.
- List blocks.
- Folder blocks.
- Output blocks.

When you create a content block, you select block type, block contents, and the block layout.

Content Window

From the Content window, you can create the content blocks that display when you open Dashboard. You can:

- Add content blocks.

- Remove content blocks.

- Edit content blocks.

- Select the content layout.

- Save changes.

When you open the Content window, a list of the current block names, content for the blocks, and the block types display. If you place your cursor over a content item, the full path of the procedure displays, including the domain name and folder name.

If you are opening the Content window for the first time, the content list displays the content blocks and pages your Administrator has set up for you. You can add, remove, or edit these.

Procedure **How to Access and Exit the Content Window**

From the Dashboard banner, click *Personalize*. The Content window opens.

To exit the Content window, click *Done*. Dashboard automatically refreshes to include your changes.

Creating Content Pages

You can create content pages for Dashboard that contain your content blocks. Content pages appear as tabs that display the name of the content page across the top of the content area. Pages can be viewed by clicking the appropriate tab.

Using content pages enables you to:

- Expand the amount of space you have to display content in Dashboard.

- Organize Dashboard content.

- Keep the default view that has been set up by the Dashboard administrator while at the same time create personalized content pages.

Multiple content pages are optional. When you are adding content blocks, if you only have one content page then tabs will not display in the actual Dashboard view.

You can create as many content pages as you need. You can also customize the layout of the page. For details see, *Selecting Content Layout* on page 3-12.

When creating content pages, note that:

- You can rearrange the order of the pages using the Move Left, Move Right, and Set Default buttons in the Content window. The Set Default button promotes the current page to the first page.

- Only one output block is allowed per page.

- When Dashboard opens, only the reports on the content page that displays will execute. All other reports will execute when you click the respective content page tab.

- Reports on content pages will not automatically refresh when tabbing from one page to another. To refresh a report, click the Refresh button in the control bar for that report.

Procedure **How to Create Content Pages**

1. From the Content window, click *Add Page*.

2. Enter the tab name in the Page Description text box.

3. Click *Update*.

   When a page is added, it is added as the last page. You can rearrange the order of the content pages using the Move Left, Move Right, or Set Default buttons. The Set Default button promotes the current page to the first page.

Adding a Content Block

From the Add Block window, you can create content blocks in addition to those your Administrator has created for you. The following are the types of content blocks you can create:

- **Launch blocks** can contain only one item. When you open Dashboard, this item will automatically run (or launch) in Dashboard.

- **List blocks** can contain many items from one or many domains. You can run a report or access an Internet resource by clicking an item from the list.

- **Folder blocks** list the entire contents of a folder (or subfolder) that have been created in Managed Reporting. When the contents of a Managed Reporting folder are modified outside of Dashboard (by you or your Administrator), the folder block in Dashboard automatically updates to reflect any changes. Only one folder can be added to a folder block. You can add folders from the Standard Reports, My Reports, and Shared Reports folders.

- **Output blocks** may or may not contain content. They are blocks where reports, graphs, or Web pages appear. When a report is run or an Internet resource is accessed, the report output or Web page displays in the output block. This is useful because Dashboard will not open a new browser window each time a report or graph is executed, or a Web page is launched from the Domain Tree, Role Tree, List, or Folder block. It will instead refresh the output block with the new content.

  When you create an output block, scrolling options are not available. Scroll bars display when necessary.

Some Web sites will bring their page to the top of a frameset when launched and take over the browser session. When these sites are opened in a launch or output block, Dashboard content will be lost. It is recommended that these types of Web sites not be selected for a launch or output block.

When you add items to a content block, you can use the Domain Search from the Add Block and Edit Block windows. For details, see *How to Add Items to a Content Block Using Domain Search* on page 3-6.

Procedure: How to Add a Content Block

1. From the Content window, select the content page you want to add content to. If you need to add content pages, see *How to Create Content Pages* on page 3-3 for details.

2. Click *Add Block*. The Add Block window opens.

3. Select the *Launch block*, *List block*, *Folder block*, or *Output block* radio button.

    If you are creating an Output block, steps 4-7 are optional since Output blocks do not require default output.

4. Select a domain from the drop-down list. You can also add items to a content block using Domain Search. For details, see *How to Add Items to a Content Block Using Domain Search* on page 3-6.

5. Click *Submit* to retrieve the contents of the selected domain.

6. Expand the domain folders you wish to select items from by clicking the plus sign (+) located next to the folder icon.

7. Click the items in the domain folders to populate the Content List.

8. Accept the default Block name or change the name in the Block name text box.

9. Select the *Enable Scroll Buttons* or *Enable Scroll Bar* radio button.

10. Click *Save* when you have finished selecting the content for your block.

Procedure **How to Add Items to a Content Block Using Domain Search**

1. From the Add Block or Edit Block window, click *Domain Search*.

2. Enter the criteria for your search and then click *Search*. For complete details on using the domain search, see Chapter 2, *Using Dashboard*.

3. From the results on the right side of the window, click on an item to add it to your content block. View your content block to see the items you have added.

Removing a Content Block

From the Content window, you can remove a content block. Note that you can remove more than one content block at a time.

Procedure **How to Remove a Content Block**

1. From the Content window, select the content page where the content block is located.

2. Click the check box(es) next to the block(s) you wish to remove.

3. Click *Remove*. An alert window appears to confirm the removal.

4. Click *OK* to confirm the removal.

Editing a Content Block

From the Edit Block window, you can edit existing content blocks. When you select the edit option, the name of the content block and its attributes display in the Edit Block window. You can edit the block type, block contents, block name, and scrolling options.

You can also deactivate a content block. This is useful when you want to temporarily remove a content block from your Dashboard view. When a content block is deactivated, it is designated in the Content window with a red icon (as opposed to green, which designates an active content block).

Procedure **How to Change the Content Block Type**

Note: When you change the content block type, all of the items in the block will be removed and the block name will clear.

1. From the Content window, select the content page where the content block is located.

2. Click the check box next to the content block you wish to edit.

3. Click *Edit Block*. The Edit Block window opens.

    You can also access the Edit Block window directly from Dashboard by clicking *Edit* for the content block you wish to edit.

4. Select the radio button of the block type you wish to change to.

    All of the items in the block will be removed and the block name will clear.

5. Click *Save*.

Procedure **How to Add an Item to a List Block**

1. From the Content window, select the content page where the content block is located.

2. Click the check box next to the list block you wish to edit.

3. Click *Edit Block*. The Edit Block window opens.

    You can also access the Edit Block window directly from Dashboard by clicking *Edit* for the content block you wish to edit.

4. Select a domain from the drop-down list. You can also add items to a content block using Domain Search. For details, see *How to Add Items to a Content Block Using Domain Search* on page 3-6.

5. Click *Submit*.

6. Navigate to the item you wish to add in the Domain Tree by clicking the plus sign (+) located next to the folder icon.

7. Click an item to add it to the Content List.

8. Click *Save*.

How to Remove an Item From a List Block

1. From the Content window, select the content page where the content block is located.

2. Click the check box next to the list block you wish to edit.

3. Click *Edit Block*. The Edit Block window opens.

   You can also access the Edit Block window directly from Dashboard by clicking *Edit* for the content block you wish to edit.

4. In the Content List, highlight the item you wish to remove.

5. Click *Remove*.

6. Click *Save*.

How to Change the Contents of a Launch Block

1. From the Content window, select the content page where the content block is located.

1. Click the check box next to the launch block you wish to edit.

2. Click *Edit Block*. The Edit Block window opens.

   You can also access the Edit Block window directly from Dashboard by clicking *Edit* for the content block you wish to edit.

3. Highlight the item in the Content List.

4. Click *Remove*.

5. Select a domain from the drop-down list. You can also add items to a content block using Domain Search. For details, see *How to Add Items to a Content Block Using Domain Search* on page 3-6.

6. Click *Submit*.

7. Navigate to the item you wish to add in the Domain Tree by clicking the plus sign (+) located next to the folder icon.

8. Click an item to add it to the Content List.

9. Click *Save*.

Procedure **How to Change the Contents of a Folder Block**

1. From the Content window, select the content page where the content block is located.

2. Click the check box next to the folder block you wish to edit.

3. Click *Edit Block*. The Edit Block window opens.

   You can also access the Edit Block window directly from Dashboard by clicking *Edit* for the content block you wish to edit.

4. Highlight the item in the Content List.

5. Click *Remove*.

6. Select a domain from the drop-down list. You can also add items to a content block using Domain Search. For details, see *How to Add Items to a Content Block Using Domain Search* on page 3-6.

7. Click *Submit*.

8. Navigate to the folder you wish to add in the Domain Tree.

9. Click a folder to add it to the Content List.

10. Click *Save*.

Procedure **How to Change the Name of a Content Block**

1. From the Content window, select the content page where the content block is located.

2. Click the check box next to the block you wish to edit.

3. Click *Edit Block*. The Edit Block window opens.

   You can also access the Edit Block window directly from Dashboard by clicking *Edit* for the content block you wish to edit.

4. In the Block name text box, enter the new name for the block. This must be a unique name within Dashboard.

5. Click *Save*.

Selecting Scrolling Options

You can select either scroll buttons or scroll bars for launch blocks, list blocks, and folder blocks. Scroll buttons cannot be selected for output blocks and launch blocks that launch Web pages. Output blocks will automatically contain scroll bars when necessary.

When scroll buttons are enabled, up, down, left, and right arrows display in the control bar allowing you to navigate the content block. Up and down arrows display for all content block types. Left and right arrows only display for launch blocks. In folder blocks and list blocks information automatically wraps, therefore eliminating the need to scroll to the left or right.

When scroll bars are enabled, scroll bars display when content exists that cannot be viewed within the displayed window. When this option is selected, scroll buttons do not display in the control bar.

Procedure **How to Select Scrolling Options for Content Blocks**

1. From Dashboard, click *Personalize*. Alternatively, you can click *Edit* from the content block control bar.

2. Select the content block you wish to add scrolling options for and click *Edit Block*. The Edit Block window opens.

3. Select the *Enable Scroll Buttons* or *Enable Scroll Bars* radio button.

4. Click *Save*.

Selecting Content Layout

From the Layout window, you can change the content block layout your Administrator has selected for you. You can select a different layout for each content page.

When selecting the layout for your content page, you can:

• Add columns.

• Remove columns.

• Specify column width.

• Rearrange column order.
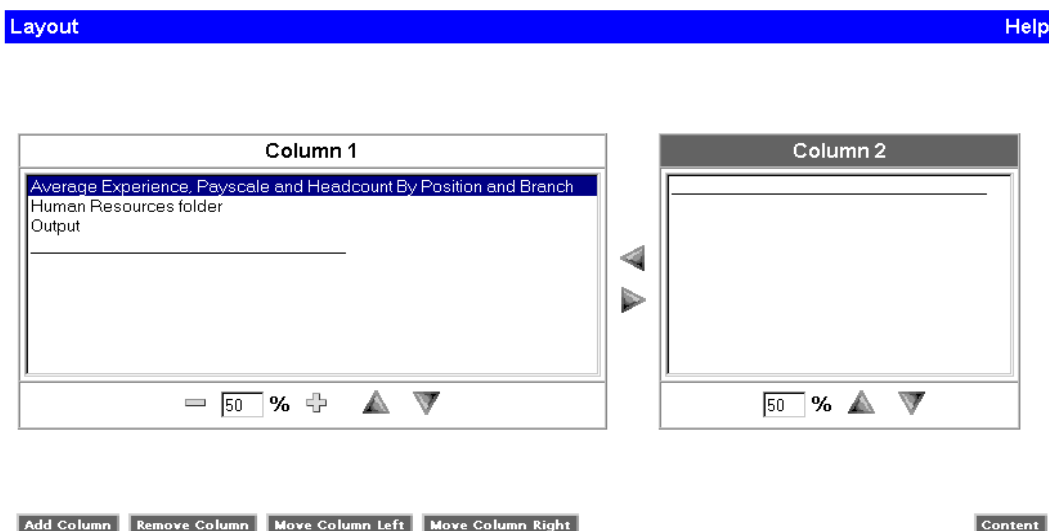
Procedure **How to Add a Column**

1. From the Content window, select a content page and then click *Page Layout*.

2. Click *Add Column*. To move:

   • Items from one column to another, highlight the item and use the left and right arrows between the columns.

   • The position of a column, select the column and click *Move Column Left* or *Move Column Right*.

3. Click *Content* to return to the Content window.

Procedure **How to Adjust Column Width**

1. From the Content window, select a content page and click *Page Layout*.

2. Click the + or - signs in the column to adjust column width.

    Note that you cannot adjust the width for the last column. Since column width total must equal 100%, the last column will always be the remainder of all the other columns. For example, if you have 3 columns and column 1 is 50% and column 2 is 25%, column 3 will automatically be 25%.

3. Click *Content* to return to the Content window.

Exiting the Content Window

After you have created all of your content blocks, click *Done* on the Content window to save all changes. All of your changes automatically refresh and you return to the Dashboard view.

CHAPTER 4

Using the Deferred Report Status Interface

Topics:

- Introducing the Deferred Report Status Interface
- Deferred Report Status Interface Features

This chapter provides an overview of the Deferred Report Status interface including a detailed description of its appearance and functions. Specific procedures guide you through viewing, saving and deleting reports, deleting deferred reports that are being processed but are not yet complete, as well as reviewing parameters for reports containing amper variables. A comprehensive example, included at the end of this chapter, guides you through a series of steps that demonstrate the procedures in practical terms.

Introducing the Deferred Report Status Interface

The Deferred Report Status interface enables you to obtain information about deferred reports. You can open this interface to view the status of deferred reports at any time by selecting the Deferred Status option. From this interface, you can perform the following actions on a deferred report:

- Sort deferred report output by date, description, domain, and server ID.

- View deferred report output.

- Delete a deferred report from the WebFOCUS Reporting Server.

- Save the report output as a My Report.

- Review or change parameters associated with a deferred report.

- View the number of days remaining prior to expiration (deletion) on the server.

- Terminate a deferred request that is in the deferred report queue.

- Terminate a deferred report that is executing.

Deferred Report Status Interface Features

The Deferred Report Status interface includes:

- A banner at the top of the window that lists the date and time of the request.

- A gray toolbar below the banner that contains Refresh and Help options, as well as a drop-down list with sort values and a button that controls sort order (ascending or descending).

- The status of each report within the interface.

Sort Controls for the Deferred Report Status Interface

The sorting feature pertains to the entire report. When the default sort value (Date/Time Submitted) is changed, the new primary sort becomes the user's choice, but the secondary sort is always fixed as Date/Time Submitted. To resort the list, the user selects the Sort by option:

- Date (default)

- Description

- Domain

- Server ID (This does not actually display as a column. For more information, see *Special Behavior for Sorting by WebFOCUS Reporting Server User ID* on page 4-7.)

You can optionally change the sort order (ascending or descending) by clicking the button, which cycles between A to Z and Z to A.

Note: When the sort value is Date, the sort order option A to Z means from new to old and not alphabetical from A to Z.

To see the results of the new sort options, click *Refresh*.

Deferred Report Status

The status of deferred requests are organized under the following sections within the interface:

- **Completed.** Indicates that the Deferred Receipt request has finished processing.

- **Running.** Indicates that the Deferred Receipt request is processing.

- **Queued.** Indicates that the Deferred Receipt request is queued for processing.

> • **Unknown.** Indicates that the Deferred Receipt request cannot be identified. This can occur when the file containing the deferred report results cannot be found. For more information, see *Deferred Report Expiration Setting* on page 4-6.

Column headings provide information about the Standard Report including the date and time the Standard Report was submitted, the domain of origin, a description of the report (the report name), an expiration indicator, and an Options heading for user options within the Deferred Report Status interface.

When a user selects the Deferred Status option, the status for all the deferred requests submitted by their Managed Reporting user ID is obtained. Depending on how the Managed Reporting environment was configured, the deferred status may be coming back from multiple WebFOCUS Reporting Servers on various platforms. If user credentials are required for the connections, they will be prompted for by the WebFOCUS Dynamic Server System Signon feature. A user can view the status of all the deferred requests submitted by their Managed Reporting user ID, but can only delete, view, save, stop, or review parameters for deferred requests submitted with an identical WebFOCUS Reporting Server user ID.

Caution: Sharing Managed Reporting user IDs is not recommended.

The options available in the Deferred Report Status interface are based upon the status of the report request and security validation. A user can perform various functions by clicking the buttons under Options:

- **Delete.** Available for all report status categories. The Delete option deletes the deferred request according to the report status, as follows:

    - **Queued.** When a deferred request is listed in the Queued tab, the Delete option removes the deferred report from the WebFOCUS Reporting Server and deletes the deferred request ticket from the WebFOCUS Repository.

    - **Unknown.** When a deferred request is listed in the Unknown tab, the Delete option deletes the deferred request ticket from the WebFOCUS Repository.

    - **Completed.** When a deferred request is listed in the Completed tab, the Delete option removes the report from the window and deletes the deferred report results from the WebFOCUS Reporting Server and deletes the deferred request ticket from the WebFOCUS Repository.

    - **Running.** When a deferred request is listed in the Running tab, the Delete option deletes the deferred request ticket from the WebFOCUS Repository and cancels the job on the WebFOCUS Reporting Server.

- **View.** Available when the report status is Completed.

    The View option displays the completed report in a new browser session, or the report format may result in the opening of a Windows dialog box that prompts the user to save the report to disk or open the report within an application (Microsoft Excel, Microsoft Word, Adobe Acrobat).

- **Save.** Available when the report status is Completed.

    The Save option saves the report to a special folder, Deferred Reports Output, in the Domains My Reports tab. The description of the My Report is the description that displayed in the Deferred Report Status interface, along with the date and time the My Report was created.

    Note: This option does not display for users with User or HTML User privileges. Users and HTML Users cannot save report results to the Managed Reporting Repository.

- **Parameters.** Available when the report status is completed or queued. The parameters option allows a user to review or change report variables.

    Changing report variables generates a new report that does not overwrite the original request.

Under certain circumstances, WebFOCUS is unable to submit the request to run in deferred mode. This can occur, for example, when the WebFOCUS Reporting Server is unavailable. When WebFOCUS is unable to submit a deferred request, a Deferred Receipt Notification window opens, notifying the user of the failure.

Deferred Report Expiration Setting

The number of days until expiration appear next to each report. On the last day, the value Today appears.

The following shows the results of a deferred status request, run on the afternoon of October 26. (The current date displays in the status bar at the top of the page.) Each report is listed with the time remaining before it is deleted from the WebFOCUS Reporting Server. The time remaining is based on 24-hour intervals (rather than whole days) beginning with the time that the report was submitted. For example, the last report shown on the list will be deleted shortly after 1:10 pm on October 27, not at midnight on October 26.

If a deferred report is not saved or deleted prior to its expiration, the output is automatically deleted from the WebFOCUS Reporting Server's dfm_dir directory and the deferred report is moved to the Unknown category in the Deferred Report Status interface. From here, the user can only delete the orphaned report.

If deferred output expiration is not configured on your WebFOCUS Reporting Server, then the value Never displays next to each report under the Expires In column.

Note: This setting does not affect deferred output saved to the user's My Report area.

Special Behavior for Sorting by WebFOCUS Reporting Server User ID

Sorting by WebFOCUS Reporting Server user ID enables users to bring deferred reports they want to interact with to the top of the list. At the same time, the deferred reports that users cannot interact with are pushed to the bottom of the list and sorted alphabetically.

This is a special sort. Regardless of the setting for a>z or z>a when the sort value is Server ID, deferred reports for the current ID appear at the top. These are followed, in sort order, by deferred reports for other Server IDs, if any exist. The Server ID automatically displays under the Options tab.

Example   **Sorting by Server ID**

Users may see deferred reports listed that they are not allowed to interact with if they:

- Are inconsistent with the case that they use when they login with their WebFOCUS Reporting Server ID.

- Connect to different WebFOCUS Reporting Servers or the same WebFOCUS Reporting Server at different times with different WebFOCUS Reporting Server user IDs.

Setting the Automatic Refresh Interval

You can set the automatic refresh interval to any value. The default is 5 seconds and there is no maximum value.

Procedure **How to Set the Automatic Refresh Interval**

1. Enter a time interval (in seconds) in the input box below the gray toolbar.

   The default value is 5 seconds. There is no maximum value.

2. Check the box to enable automatic refresh.

Viewing Deferred Reports

All users must access the Deferred Report Status interface to view deferred reports.

Procedure **How to View a Deferred Status Report**

1. Open the Deferred Report Status interface.

2. To view the output of a deferred report:

   a. Locate the report's description under the Completed tab.

   b. Click *View*, under the Options column, to view the report.

   The report output displays in a new window.

3. The Deferred Report Status interface remains open until closed.

   a. To return to the Deferred Report Status interface, close or minimize the report output window.

   b. To return to your reporting environment, close or minimize the report output window, then close the Deferred Report Status interface.

4. Click *Refresh* to obtain the most current status of deferred requests.

Reviewing Deferred Report Parameters

The Deferred Report Status interface allows any user to retrieve parameters submitted with a deferred request. You access parameters by opening the Deferred Report Status interface and clicking the parameters button for the report of your choice. WebFOCUS then displays the report output using the parameters you entered.

You can also change the parameters associated with a report after viewing the report. If you change parameters after viewing your report, WebFOCUS generates your report again using the new parameters you have submitted, and does not overwrite your original report request.

Procedure **How to Retrieve Deferred Request Parameters**

1. Open the Deferred Report Status interface.

2. In the Completed or Unknown tabs, identify the report containing the parameters to review.

3. Click *Parameter* under the Options column heading.

   An intermediate window (HTML form) opens.

   a. To review and accept the original parameters, close the browser window.

   b. To change the parameters, enter a new value in the input box.

   The original request runs in addition to the newly submitted request.

4. Click *Submit*.

   The Deferred Report Notification window opens.

5. Close the Deferred Report Notification window to return to the Deferred Report Status interface.

Example **Using Deferred Report Status Interface Options**

In the following example, you will manipulate a report called Current Salary Report that has been submitted as a deferred request. This example is based on a report developed using the Employee Master File and is intended to offer a practical demonstration of some of the options available in the Deferred Report Status interface. You should note that an Administrator can develop a similar file for training purposes.

1. Open the Deferred Report Status interface.

2. Locate *Current Salary Report* under the Completed tab.

3. Click *Parameters* under the Options column heading.

   An intermediate window (HTML form) opens.

4. Enter the value "A17" in the input box and click *Submit*.

   The Deferred Report Notification window opens confirming receipt of your request.

5. Close the Deferred Report Notification window to return to the Deferred Report Status interface.

To view Current Salary Report:

1. Locate *Current Salary Report* under the Completed tab again.

2. Click *View*.

   An intermediate window (HTML form) opens with the value A17 entered in the input box.

3. Click *Submit*.

   WebFOCUS displays Current Salary Report in a separate browser window.

PAGE 1					
EMP_ID	LAST_NAME	FIRST_NAME	CURR_SAL	EFFECT_DATE	JOBCODE
119329144	BANNING	JOHN	$100,000.00	83/01/01	A17
818692173	CROSS	BARBARA	$222,284.00	83/05/01	A17

4. Close the window to return to the Deferred Report Status interface.

5. Click *Save* under the Options column.

   WebFOCUS saves Current Salary Report.

6. Close the Deferred Report Status interface to return to your reporting environment.

Saving Deferred Reports

You can save Deferred Receipt reports to the Managed Reporting Repository, if your administrator has defined you as an HTML user or has set the run-only privilege for you. The report output is saved to your directory in the Managed Reporting Repository by domain. When your deferred report is saved to the Managed Reporting Repository, it is removed from the Deferred Report Status interface.

When you save a deferred report, a new group folder, Deferred Reports Output, is created under the My Reports tab within the Domain of origin. There is one group folder, Deferred Reports Output, for each domain. WebFOCUS lists your saved deferred reports under the Deferred Reports Output group folder and adds "Output of" as well as the date and time the My Report is saved to the report name.
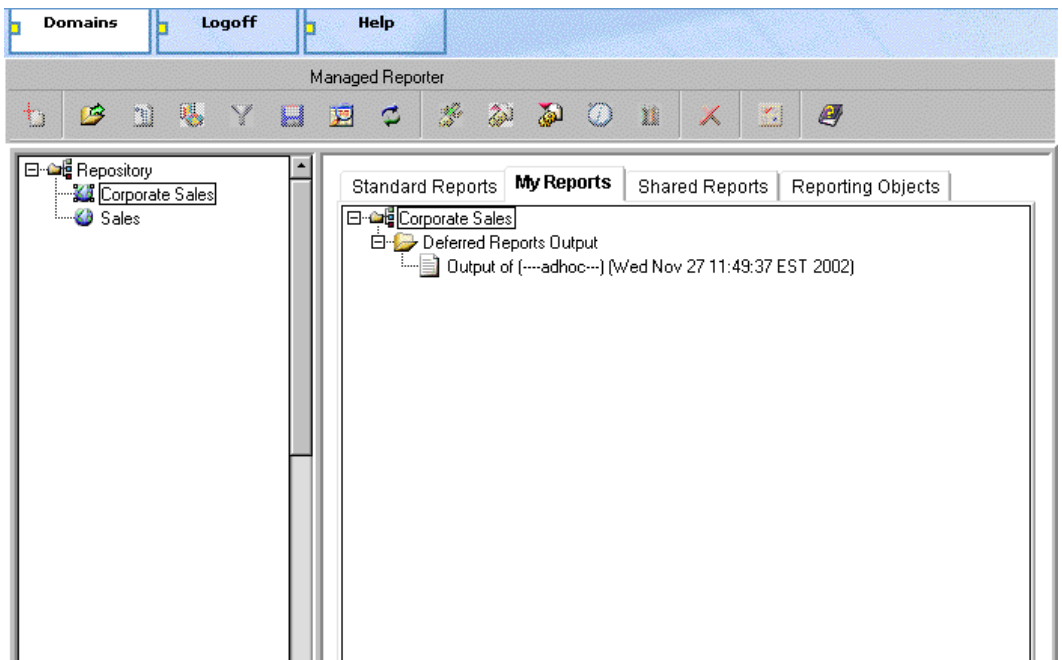
Procedure **How to Save a Deferred Report**

1. Open the Deferred Report Status interface.

2. Locate the report you want to save under the Completed tab.

3. Click *Save* located to the right of the deferred report description, under the Options column.

   Note: Run-only users and HTML users will not see the Save button.

   WebFOCUS saves the deferred report results to the user's My Reports tab in the Deferred Output group folder.

4. To return to your reporting environment, close the Deferred Report Status interface.

Creating a Report With Report Assistant

Topics:

- Accessing HTML Report Assistant
- Layout of Report Assistant
- Building Your Report With Report Assistant
- Selecting Report Fields
- Creating Temporary Fields and New Columns
- Defining the Characteristics of Detail/Sum Fields With Fields Options
- Applying Predefined StyleSheets
- Customizing Headings and Footings
- Selecting Records for a Report
- Grouping Expressions Together With Parentheses
- Limiting Data With Filters
- Joins
- Applying Other Report Options
- Applying Cascading Style Sheets
- Running a Report
- Saving a Report
- Editing a Report

WebFOCUS Report Assistant is an HTML-based graphical tool that allows you to select a data source, specify any sorting or grouping information, and display the report in your browser or another desktop application. When you use Report Assistant, WebFOCUS creates a styled report that you can deploy on the Web without the necessity of learning the complexities of any reporting language. You can then take full advantage of the capabilities of the FOCUS reporting language to efficiently display your company's data.

Note: Your administrator may have configured your site to use the applet version of Report Assistant. For more information, see the online help.

Accessing HTML Report Assistant

You can access the HTML Report Assistant through Dashboard, Managed Reporting, or as a self-service application.

HTML Report Assistant is accessible from the following locations:

- Through Dashboard.

- During the creation of a new Standard Report.

- When a report is selected during the creation of a Reporting Object.

- When editing a Reporting Object within Domains.

- When editing a My Report within Domains.

- As a self-service application.

Layout of Report Assistant

Report Assistant builds your report as you select graphical options by internally constructing a procedure according to the rules of the FOCUS reporting language. For more information on FOCUS syntax, see the *Creating Reports With WebFOCUS Language* manual.

Report Assistant is divided into the following sections or tabs:

- Fields

- Fields Options

- Headings

- Selection Criteria

- Join

- Report Options

Before Report Assistant opens, you may be prompted to supply a WebFOCUS Reporting Server ID. For more information, see *Dynamic Server Signon Feature* on page 2-15.

Each tab contains explanatory text designed to guide you on using the specific features accessed within the tab.
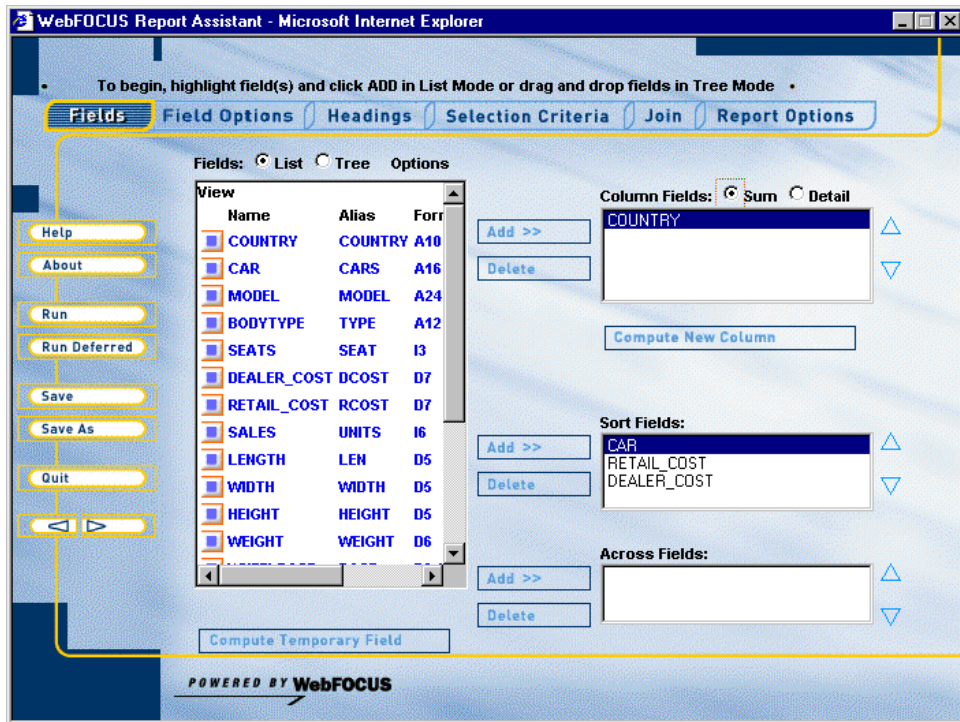
Availability of tabs and buttons depends on the type of user logging on to Dashboard or WebFOCUS. Self-service users do not have access to the Join tab, or the Run Deferred, Save, or Save As buttons.

Each tab contains a set of options that enable you to customize both the content and appearance of your report. To toggle between tabs, select each tab at the top of the window or use the arrow buttons at the left of the window. Click *About* to display the version and release number of Report Assistant.

Building Your Report With Report Assistant

The most basic report you can construct is a tabular report. Other report types build on the basic design of the tabular report. A tabular report is a report whose information is arranged vertically in columns. Internally, WebFOCUS constructs your report with a series of simple commands that mark the beginning of the request, identify the data source, and mark the end of the request. Other aspects of the request, such as styling information, are not necessary to produce a valid report request.

Use the following basic steps in constructing your report:

- **Design** your presentation. How would you like to organize the information in your report?

  See *Selecting Report Fields* on page 5-5 for more information about establishing basic organizational criteria for your report.

- **Identify** the information you would like to present. Is it a full data set or do you want to construct a subset of some larger set?

  See *Selecting Report Fields* on page 5-5 for more information about establishing selection criteria for your data.

- **Style** your presentation. Do you want to apply customized headings or footings to your report to make it more dynamic?

  See *Customizing Headings and Footings* on page 5-36 for more information about basic styling in your report.

Selecting Report Fields

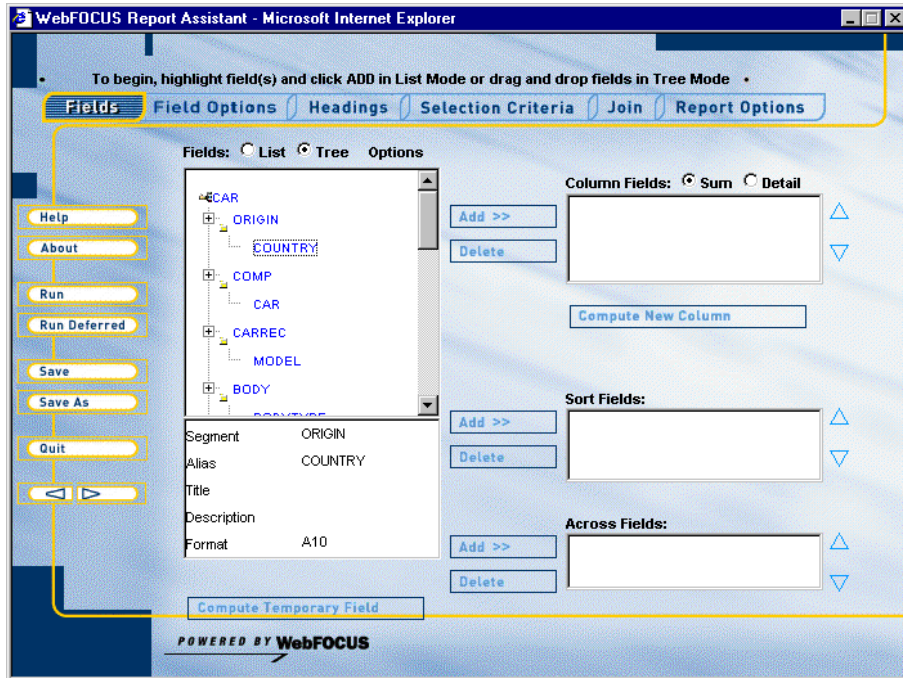You begin building your report in the Fields tab by selecting fields to include. A field is the smallest meaningful element of data in a file. WebFOCUS lists available fields in two formats:
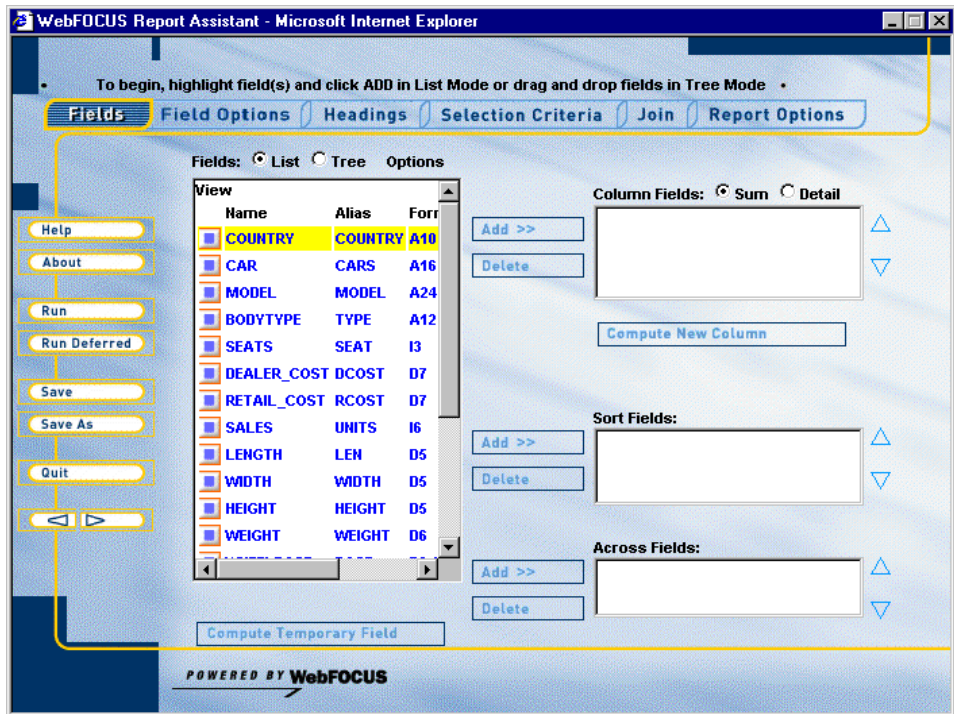
- As a list of fields.

- As a tree separated by segments.

In Tree mode, the following options display in a box below the tree: Segment, Alias, Title, Description, and Format. In List mode, you can view one or more options: Name, Alias, Title, Remarks, Format, Description, Segment, Colno, and Filename. In List mode, you can sort any list of variables alphabetically from a to z or from z to a by clicking the attribute, for example, name or alias. Clicking the Fields radio button will toggle between the two formats. List is the default.

Options allow you to use the alias and/or prefix the field names.The prefix can be by file name, segment name, or both. Click Options and select Use Alias, Prefix with SegName, or Prefix with FileName. The qualified field identification may not exceed 66 characters. Your selections in the Options menu remain in effect for your current browser session and are automatically saved with your request.

If you open a report procedure in the Editor, the fields appear with their qualifiers prefixed to the field name or alias. For an illustration, see *Using Sample Code With Field Qualifiers* on page 5-7.
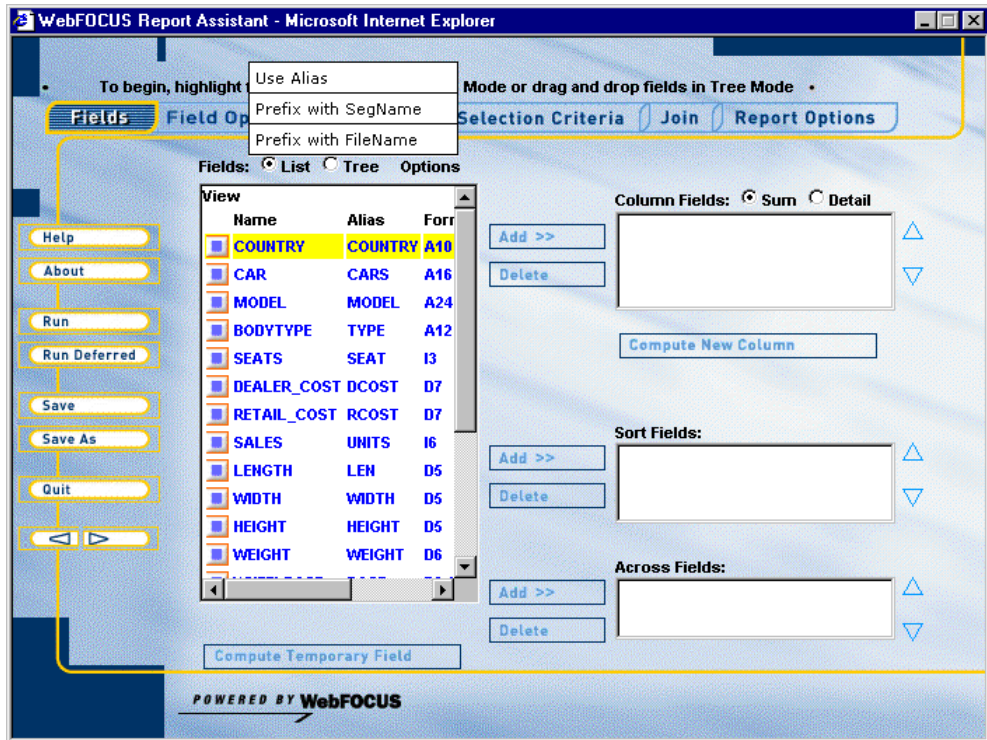
The information displays for the highlighted field. If multiple fields are selected, the information displays for the last field chosen.

Example   **Using Sample Code With Field Qualifiers**

The following procedure shows the underlying code generated by Report Assistant. Note that the fields referenced in the request—SALES, COUNTRY, CAR, and MODE—are prefixed with file and segment qualifiers.

```
TABLE FILE CAR
SUM CAR.BODY.SALES
BY CAR.ORIGIN.COUNTRY AS 'COUNTRY'
BY CAR.COMP.CAR AS 'CAR'
BY CAR.CARREC.MODEL AS 'MODEL'
```

Once you have qualified a field with an alias, segment name, or file name, the field will display with these prefixes in any windows in which that field is referenced in a request. You can vary the qualifiers you select for individual fields.

Using the Sort, Across, and Column Phrases to Organize Data

You select report fields by highlighting the field and clicking *Add* for Column Fields, Sort Fields, and Across Fields. From either the List or Tree view, you can drag and drop or use Add.
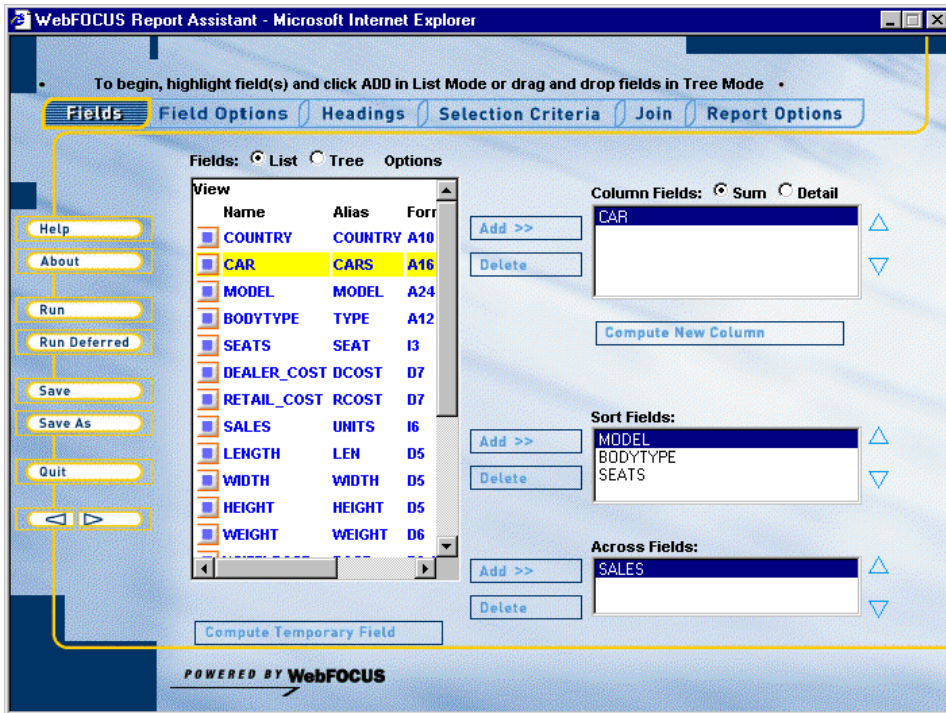
The Column Fields box designates the selected field as Sum or Detail. After selecting the field for column, you must also decide if you want WebFOCUS to add the values together (Sum) or print the values individually (Detail). WebFOCUS displays the field you select for column in the last column of your report and performs the requested operation on the data (Sum or Detail). The default selection is Sum.

Specifying sort phrases allows you to organize the presentation of information in a desired sequence. Adding fields to the Sort Fields box establishes your field as a sort field in your report. Sort fields (also known as BY fields since FOCUS sorts by these fields) are rows in your report. Any field can be a sort field and you can include up to 32 sort fields in a report.

Adding fields to the Across Fields box establishes the field you selected as a column in your report. You can create a matrix report by combining sort and across phrases. You can include a maximum of five ACROSS fields in each report. If you try to enter a sixth ACROSS field, the following message appears:

The Maximum number of Across fields is 5.

You must select at least one field for the Sort or Column boxes to create a report. For more information on FOCUS syntax used in requesting reports, see the *Creating Reports With WebFOCUS Language* manual.

Procedure **How to Add Report Fields in Tree or List View**

1. Click the *Tree* or *List* radio button.

2. Select the field from the Fields window.

3. Click *Add* to the Column, Sort, or Across Fields boxes to add the chosen field.

   or

   Click and hold the left mouse button, and drag the field to the list box you chose.

Procedure **How to Delete Report Fields in Tree or List View**

1. Click the *Tree* or *List* radio button.

2. Select the field in the Fields window.

3. Click *Delete* or press the Delete key on your keyboard.

Procedure **How to Multi-Select Adjacent Fields in List View**

1. Click the *List* radio button.

2. Click the first field you want to select.

3. Press and hold the Shift key while clicking the last field you want to include in the report.

4. Click *Add* to the Column, Sort, or Across Fields boxes to add the chosen fields.

Note: Multi-select of fields is only possible when in List mode. You must drag and drop or use the Add button to add individual fields when in Tree mode.

Procedure **How to Multi-Select Nonadjacent Fields in List View**

1. Click the *List* radio button.

2. Click the first field you want to select.

3. Press and hold the Ctrl key while clicking another field (or fields) you want to include in the report.

4. Release the Ctrl key and mouse button.

5. Press and hold the Shift key.

6. Click *Add* to the Column, Sort, or Across Fields boxes to add the chosen fields.

Note: Multi-select of fields is only possible when in List mode. You must drag and drop or use the Add button to add individual fields when in Tree mode.

Procedure **How to Select a Report Type**

To select a report type, click one of the following radio buttons on the Fields tab:

- **Sum.** A summary report shows the summarized values of the selected data source fields.

- **Detail.** A detailed report shows all selected records from a data source.

Creating Temporary Fields and New Columns

Use the Fields tab to compute new columns (column calculation) and temporary fields (virtual fields).

- A **column calculation** (COMPUTE) is a temporary field that is evaluated after all the data that meets the selection criteria is retrieved, sorted, and summed.

- A **virtual field** (DEFINE) is a temporary field that is evaluated as each record that meets the selection criteria is retrieved from the data source.

Note: End users can create column calculations, but not virtual fields.

Procedure **How to Create a New Temporary Field or New Column**

1. On the Fields tab, click *Compute New Column* or *Compute Temporary Field*. The Field Creator dialog box opens.

2. Enter the name of the field in the Field box.

3. Click in the expression box and enter an expression. Create the expression by clicking the desired operators and numbers on the keypad in the dialog box. See *Field Creator Dialog Box* on page 5-12 for more information. You can also click *Fields* to display a list of fields in the associated data source; you can add a field to the expression by double-clicking it. You can click *Functions* to display a list of available functions; you can choose a function by double-clicking it.

4. Click *OK*. New Column fields are automatically added as a column in the report. Virtual fields are added to the Fields list, where they can be selected as if they were real fields

Note: If you attempt to create a new column with greater than 66 characters, the following message appears.

```
Compute string cannot be greater than 66 characters.
```

If you attempt to create a new temporary field greater than 66 characters, the following message appears:

```
Define string cannot be greater than 66 characters.
```

Procedure **How to Edit Temporary and New Column Fields**

1. Right-click the temporary or new column field.

2. Select *Edit*. The Field Creator dialog box appears with the field's current properties.

3. Make your edits.

4. Click *OK*.

*Procedure* **How to Delete Temporary and New Column Fields**

1. Right-click the temporary or new column field.

2. Select *Delete*.

*Reference* **Field Creator Dialog Box**
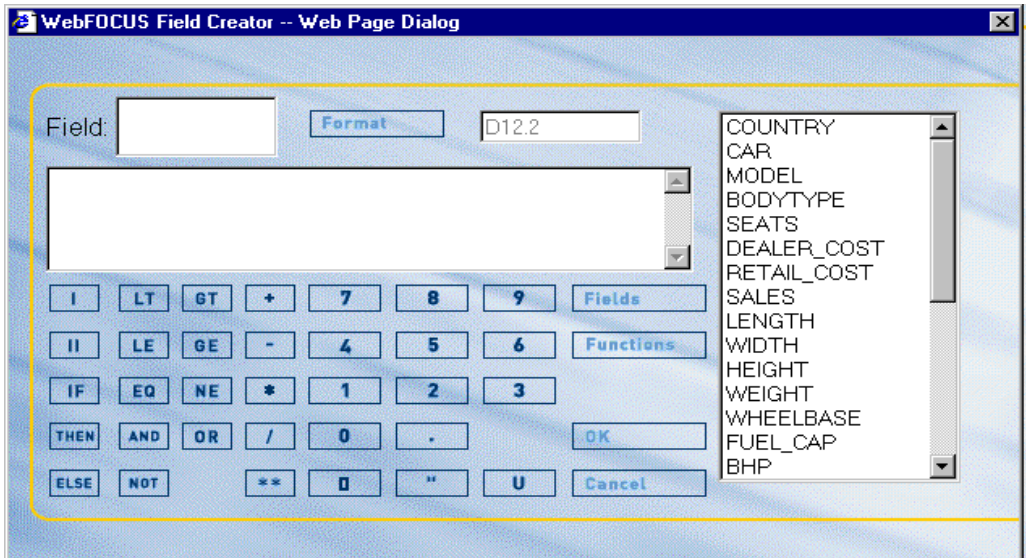
Use this dialog box to create new column and temporary field statements:

- Click *Fields* to display the Fields window.

- Double-click a field in the Fields window to include a field name in an expression.

- Click *Functions* to display a list of pre-defined functions.
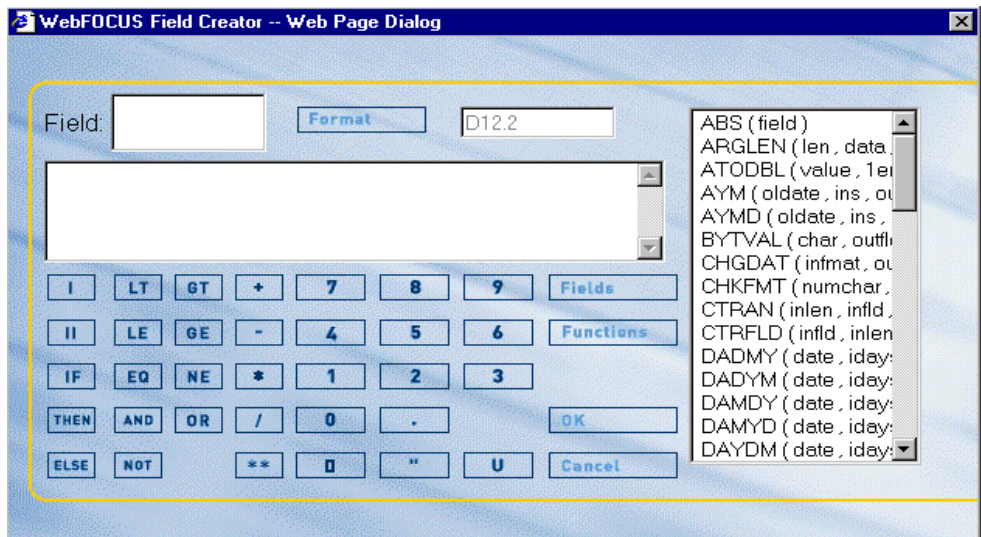
- Click an operator on the computer keypad to include arithmetic operations in an expression.

- Click a Boolean operator to include a Boolean operator in an expression.

- Click a Conditional operator to include a conditional operator in an expression.

- Click *Format* to display the Change Format Dialog box.
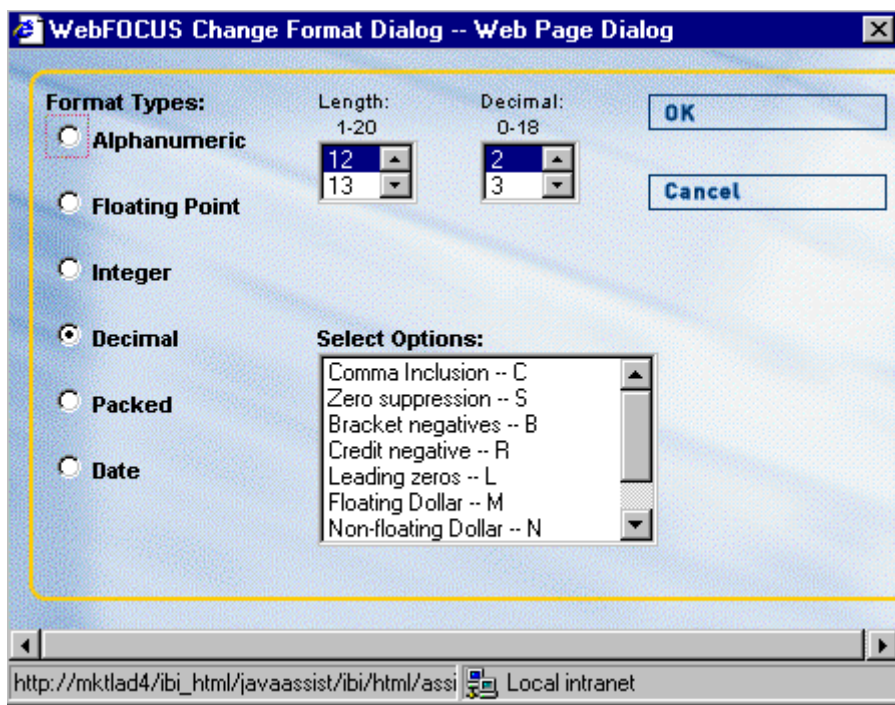
- Give the new column or temporary field a meaningful and unique name.

Note: When entering an expression that contains a literal value, enclose the value in single quotation marks.

For more information on creating temporary fields, see the *Creating Reports With WebFOCUS Language* manual.

Defining the Characteristics of Detail/Sum Fields With Fields Options

Use the Fields Options tab for Detail/Sum fields to:

- Specify field column display titles.

- Apply arithmetic operations to a numeric field.

- Suppress the display of a field.

- Include references to missing instances in reports.

The following is the Field Options dialog box for Detail/Sum fields:

Procedure How to Specify Field Column Display Titles

By default, the column titles in a report appear the same way that field names appear in the Fields window. To specify a display title that is different from the field name:

1. Click in the Field Title box and enter the new title.

2. Click *Save*.

Procedure **How to Apply Arithmetic Operations to a Numeric Field**

    1. Click the *Column Options* drop-down list.

    2. Select one of the following arithmetic operators:

Use...	To...
Average Square	Determine the average sum of the squares.
Average	Calculate the average of a field.
Count	Count the occurrences of a field.
Count Distinct	Count the distinct occurrences of a field.
Show first in group	Select the first instance of a field. (It will be physical or logical depending on the file structure.)
Show last in group	Select the last instance of a field. (It will be physical or logical depending on the file structure.)
Maximum	Determine the highest value of a field.
Minimum	Determine the lowest value of a field.
Percentage	Determine the percentage of a field value's total.
Count Percentage	Calculate a field's percentage based on the number of instances found.
Row Percentage	Determine the percentage of a row total.
Total	Add the values of a field.
Heading Total	Add the values of a field to use in a heading or footing.

    Your choice is reflected in the syntax of the field name in the Column Fields list box.

    3. Click *Save*.

Procedure **How to Suppress the Display of a Field**

    The Fields Options tab enables you to conceal the data of a selected field in a report. To suppress the display of a field:

    1. Deselect the *Visible* check box.

    2. Click *Save*.

Procedure **How to Include References to Missing Instances in Reports: The ALL. Prefix**

In a report, you can include parent segment instances that lack descendants by attaching the ALL. prefix to one or more column fields, as follows:

1. Select the *Include missing instances* check box.
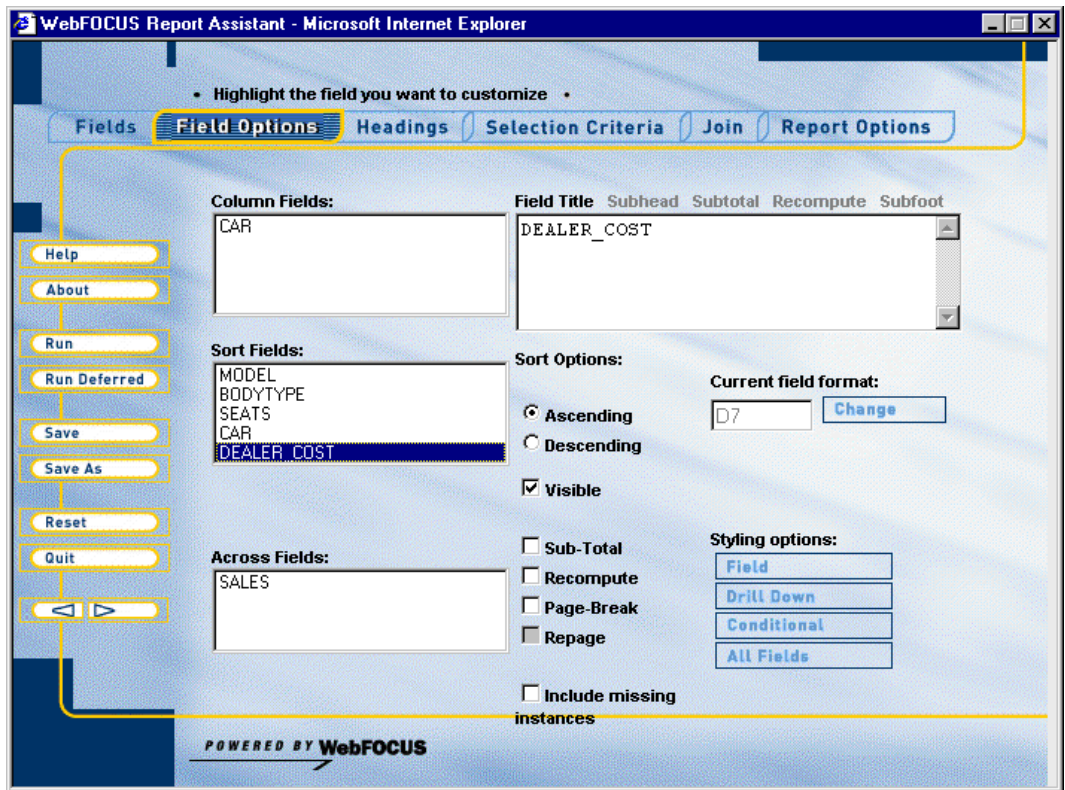
2. Click *Save*.

Note:

• The ALL. prefix and an additional prefix operator from the Column Options drop-down list may be applied to the same field.

• The ALL. prefix can be applied to multiple fields.

• The ALL. prefix can be applied to both column fields and sort fields.

Defining the Characteristics of Sort Fields

Use the field options for sort fields to:

• Arrange fields in ascending or descending order.

• Suppress the display of a field.

• Include page breaks.

• Change field title.

• Include subtotals.

• Include references to missing instances in reports.

• Include display titles for subtotals.

• Include subheads for sort fields.

• Include subfoots for sort fields.

Procedure   **How to Arrange Fields in Ascending or Descending Order**

To list sort field data in the report from greatest to smallest (descending) or from smallest to greatest (ascending):

1. Select the *Ascending* or *Descending* radio button.

2. Click *Save*.

If you have multiple sort fields, you can specify a different order for each one.

Procedure   **How to Suppress the Display of a Field**

The Fields Options tab enables you to conceal the data of a selected field in a report. To suppress the display of a field:

1. Deselect the *Visible* check box.

2. Click *Save*.

Procedure **How to Include Page Breaks**

To start a new report page when the value of a selected sort field changes:

1. Select the *Page-Break* check box.

2. Click *Save*.

Procedure **How to Include Subtotals**

To display a subtotal for numeric data when a selected sort field changes:

1. Click *Subtotal* above the Fields Title box.

2. Click *Save*.

Procedure **How to Include References to Missing Instances in Reports: The ALL. Prefix**

In a report, you can include parent segment instances that lack descendants by attaching the ALL. prefix to one or more sort fields, as follows:

1. Select a field from the Sort Fields box.

2. Select the *Include missing instances* check box.

3. Click *Save*.

Note:

•   The ALL. prefix can be applied to multiple fields.

•   The ALL. prefix can be applied to both column fields and sort fields.

Procedure **How to Include Display Titles for Subtotals**

When including subtotals, you can also specify display titles for them. These appear next to each subtotal in the report. To specify a display title for a subtotal:

1. Click *Subtotal* above the Fields Title box.

2. Enter a display title in the Subtotal box.

3. Click *Save*.

Note: If Subtotal is not selected, this action has no effect on the report.

Procedure **How to Include Subheads for Sort Fields**

The Fields Options tab allows you to include subheads for sort fields, which appear above each of the sort field's records in the report. To specify a subhead:

1. Click *Subhead* above the Fields Title box.

2. Enter a subhead in the Subhead box.

3. Click *Save*.

Procedure **How to Include Subfoots for Sort Fields**

The Field Options tab allows you to include subfoots for sort fields, which appear below each of the sort field's records in the report. To specify a subfoot:

1. Click *Subfoot* above the Fields Title box.

2. Enter a subfoot in the Subfoot box.

3. Click *Save*.

Changing a Field Format

Use the Change Format Dialog box to assign an alphanumeric, numeric, or date format to a field.
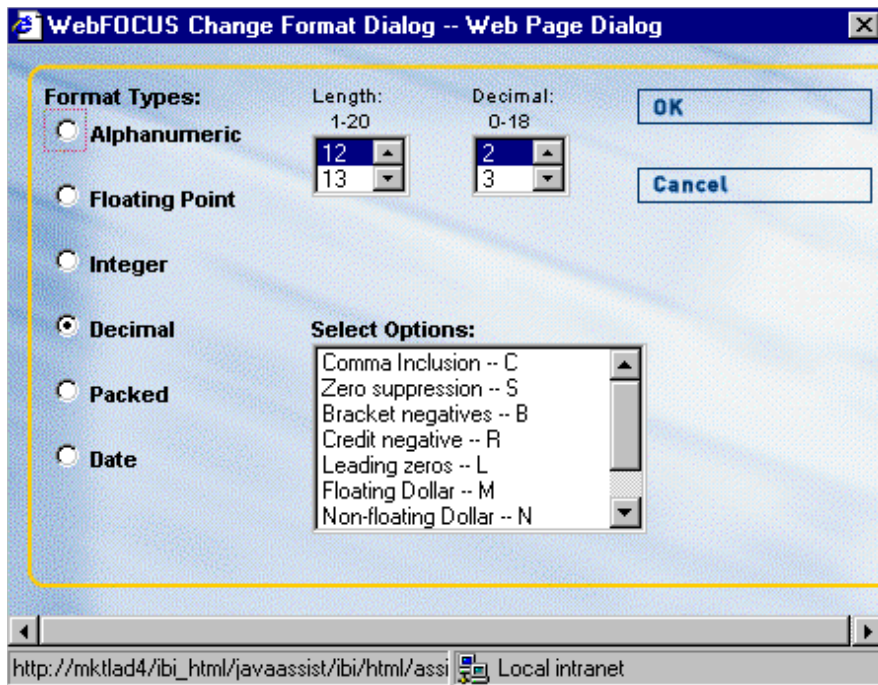
Procedure **How to Assign an Alphanumeric Format**

1. On the Fields Options tab, select the column whose format you are changing. The current field format appears.

2. Click *Change*. The Change Format dialog box opens.

3. Select the *Alphanumeric* radio button in the Format Types radio button group.

4. To assign a different length, specify a number between 1 and 256 in the Length spin box.

5. Click *OK*. The Change Format dialog box closes and the Fields Options tab returns. The new format displays in the Current field format box.

Procedure **How to Assign a Numeric Format**

1. On the Fields Options dialog box, select the column whose format you are changing.

2. Click *Change*. The Change Format dialog box opens.

3. Select one of the following radio buttons in the Format Types radio button group:

   • *Floating Point* (default length 7.2)

   • *Integer* (default length 5)

   • *Decimal* (default length 12.2)

   • *Packed* (default length 12.2)

   If the selected field matches the selected format type, its current length displays in the Length spin box. Otherwise, the default length displays in the Length spin box. The Decimal spin box shows the number of decimal places for Floating Point, Decimal, and Packed.

4. To assign a different length, specify numbers in the Length spin box for format types as follows: 1- 9 for Floating Point, 1- 11 for Integer, 1- 20 for Decimal, and 1- 33 for Packed.

5. To assign a different number of decimal places for Floating Point, Decimal, or Packed, specify the number in the Decimal spin box.

6. Click *OK* when you are done. The Change Format dialog box closes and the Field Options dialog box returns. The new format displays in the Current field format box.

Procedure **How to Assign a Date Format**

1. On the Field Options tab, select the column whose format you are changing.

2. Click *Change*. The Change Format dialog box opens.

3. Select the *Date* radio button in the Format Types radio button group. The default date display format is MDY.

4. To assign a different date display format, click the down arrow to the right of the Date Format drop-down list box.

5. Choose a date format.

6. Click *OK*. The Change Format dialog box closes and the Field Options tab returns. The new format displays in the Current field format box.

Procedure **How to Add a Percent Sign to a Numeric Field Using Compute**

To add a percent sign at the end of a numeric value (Decimal, Integer, Floating Point format types) use the Percent Sign edit option. This option is available in the Select Options box of the Change Format dialog box when creating or editing a calculated value (new column) or a virtual field (temporary field). This numeric display option includes a percent sign along with the numeric data, but does not calculate the percent.

Example **Using the Percent Sign Edit Option**

The following table shows an example of how the Percent Sign edit option displays:

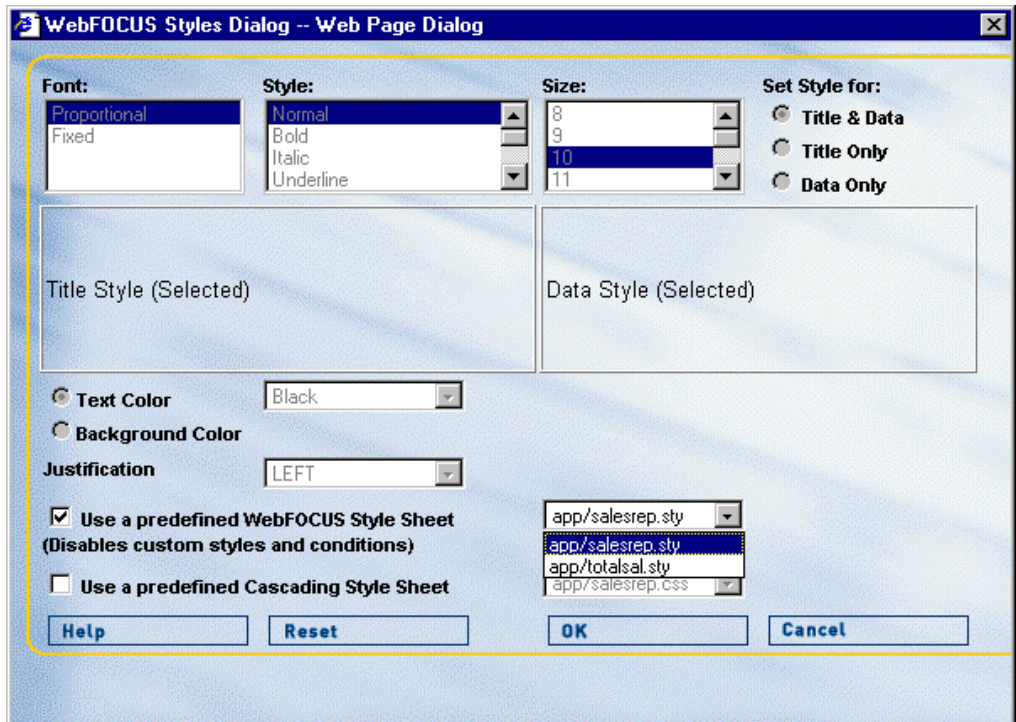| Format	Data	Display
I2%	21	21%
D7%	97	97%
F3.2%	48	48.00%

Styling Fields

Use the styling options on the Fields Options tab to:

•   Style a single report field.

•   Style all report fields.

How to Style a Single Report Field

1. On the Fields Options tab, click *Field*. The Styles for the Field dialog box opens:

2. Select the desired styling options from the Font, Style, and Size boxes.

3. In the Set Style for radio button group, select the *Title and Data* radio button, the *Title Only* radio button, or the *Data Only* radio button, depending on the report element you wish to style.

   Note: If you select a font property (font, style, size, text color, background color, or justification) and select the *Title & Data* radio button, the changes will be reflected in both the Title Style and Data Style boxes.

   However, if you then select a different parameter for a given property using the Title Only radio button, the Title Style will change while the Data Style will not reflect this change. To change the Data Style, you must click the Data Only radio button and then make your change. Likewise, if you select the Data Only radio button and make a change, this change will not be reflected in the Title Style. You must click the Title Only radio button to make your change.

4. Click the *Text Color* radio button and choose a color from the color drop-down list.

5. Click the *Background Color* radio button and choose a color from the color drop-down list.

6. Click the *Justification* option (left, right, or center) from the drop-down list.

7. Click *OK*.

Note: Clicking *Reset* returns the styling options to the following default settings:

- Font: Proportional

- Style: Normal

- Size: 10

- Text Color: Black

- Background Color: Transparent

- Justification: Left

Procedure **How to Style All Report Fields**

1. On the Fields Options tab, click *All Fields*. The Styles for All Fields dialog box opens:
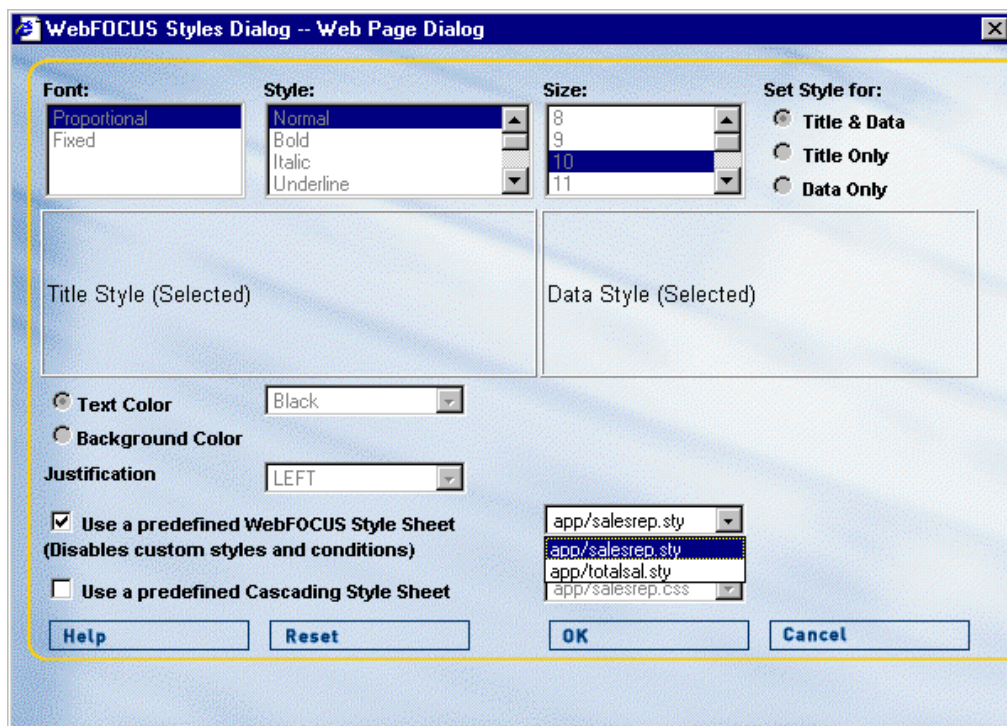
2. On the Styles for All Fields dialog box, select styling options from the Font, Style, and Size boxes.

3. In the Set Style for radio button group, select the *Title and Data* radio button, the *Title Only* radio button, or the *Data Only* radio button, depending on the report element you wish to style.

4. Click the *Text Color* radio button and choose a color from the color drop-down list.

5. Click the *Background Color* radio button and choose a color from the color drop-down list.

6. Select the justification option (left, right, or center) from the justification drop-down list.

7. Click *OK*.

Note: Clicking the *Reset* button returns the styling options to the following default settings:

• Font: Proportional

• Style: Normal

• Size: 10

• Text Color: Black

• Background Color: Transparent

• Justification: Left

Drilling Down to New Procedures

When you click Drill Down in the Fields Options tab of Report Assistant, the No action radio button is the default. When you click Execute New Procedure, a list of procedures contained with Standard Reports appears.
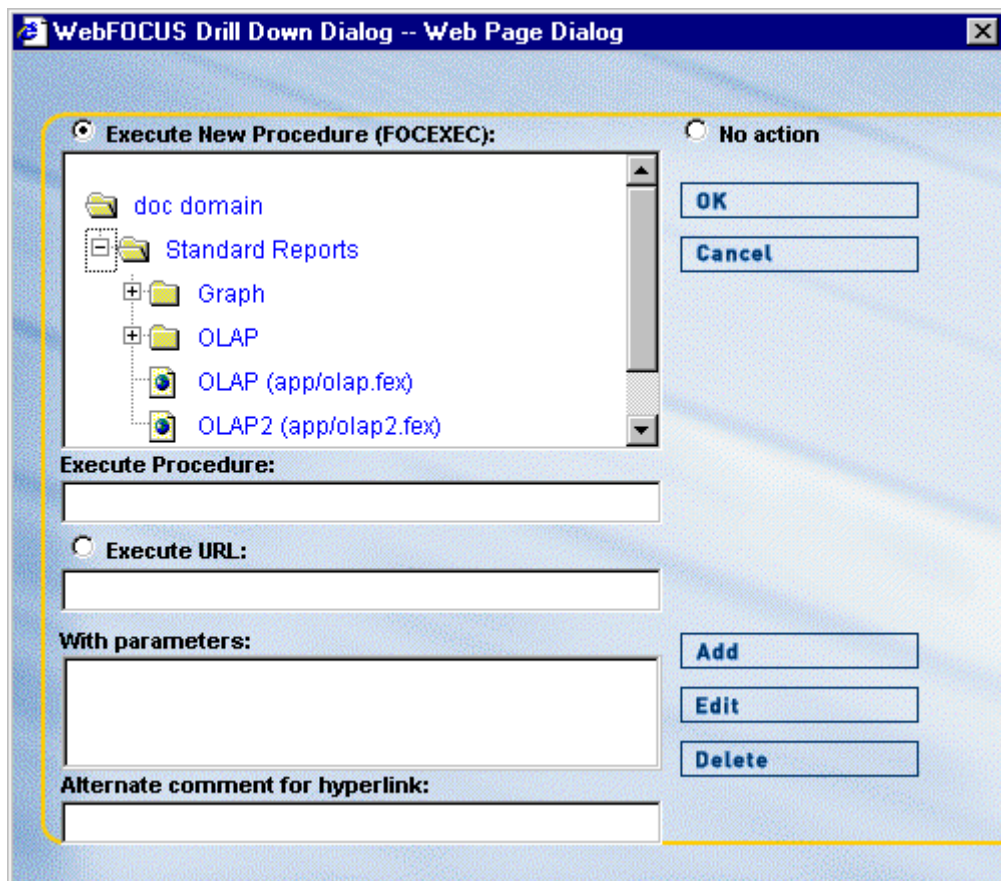
End User Drill-down Capability

Along with Managed Reporting Administrators and domain administrators, end users can now drill down to Standard Reports from within Reporting Objects and My Reports. However, the following limitations apply to the end user drill-down capability:

- End users cannot drill down to My Reports.

- End users can create drill-downs to Standard Reports from Reporting Objects.

- End users can run or delete drill-downs created by administrators or domain administrators to Standard Reports from My Reports. Delete does not alter the Reporting Object, since it only applies to ad hoc requests.

Note: The default functionality exists for all users.

Styling Records

Use the Conditional Styling dialog box to style records based on specified field values. Conditional styling, also referred to as stoplighting, allows you to define conditions that determine when to apply particular fonts, point size, text style, foreground and background color, and drill down procedures to your report's data when the report is run.

You can style specified values for one or several column and sort fields. However, you cannot style values for ACROSS fields.

Procedure   How to Style Records Based on Specified Field Values

1. On the Fields Options tab, click *Conditional*. The Conditional Styling dialog box opens:
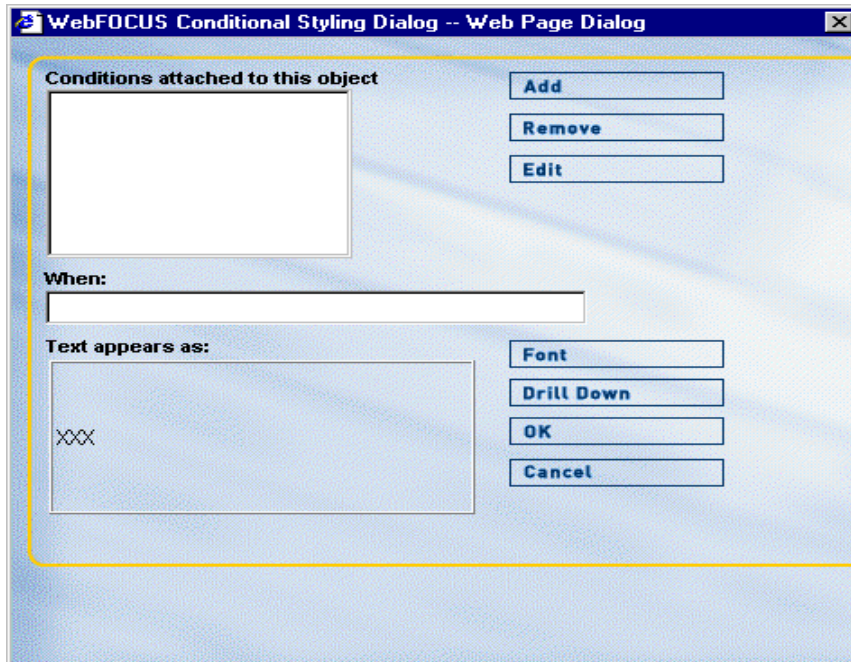
2. Click *Add*. The Edit Condition dialog box opens:
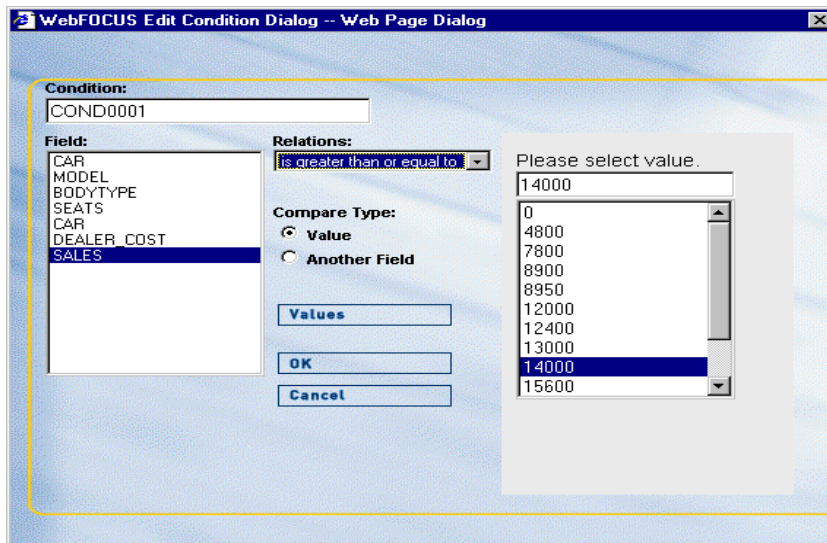
3. Provide a meaningful and unique file name in the Condition box.

4. Select a field name from the Field list box and a relation from the Relations drop-down list.

5. To specify a value that completes the relation, first select one of the following in the Compare Type radio button group:

    • *Value*, to compare the selected report field to a data source value or literal value.

    • *Another Field*, to compare the selected report field to the value of another field.

6. If you select Value under Compare Type, perform one of the following to complete the relation:

    • Click *Values* to display existing data source values in the Value list box, and select a value.

    • Type a literal value in the Value box.

7. Click *OK*. You return to the Conditional Styling dialog box.

8. Click the condition in the list box. The condition statement displays in the When box.

9. Click *Font*. The Styles dialog box opens.

10. Select the desired font characteristics.

11. Click *OK*. You return to the Conditional Styling dialog box. The specified styling options are reflected in the Text appears as box.

12. Click *OK* to return to the Fields Options tab.

Creating Parameters

Parameters enable you to specify criteria and conditions for linked (drill-down) reports. By defining parameters, you can control the amount and type of information to retrieve when you click a hotspot.
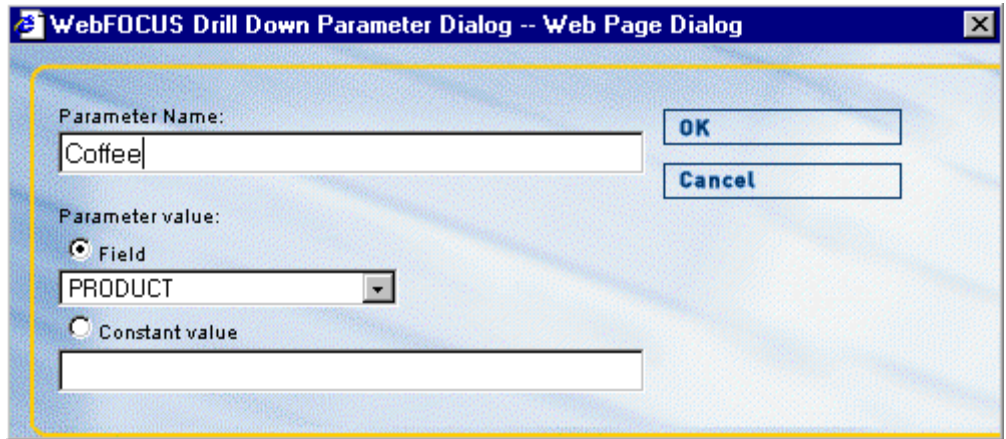
Procedure **How to Create a Parameter in the Main and Drill Down Procedures**

1. Select the Selection Criteria tab.

2. Create an expression (WHERE statement) that defines a parameter. For more information, see *Creating a WHERE Statement* on page 5-39.

3. Select the Field Options tab.

4. Select the field that you want to drill down on, for example, Product.

5. Click *Drill Down*. The WebFOCUS Drill Down Dialog opens.

6. Click *Execute Procedure (FOCEXEC)* or *Execute URL*, for example, Coffee Sales.

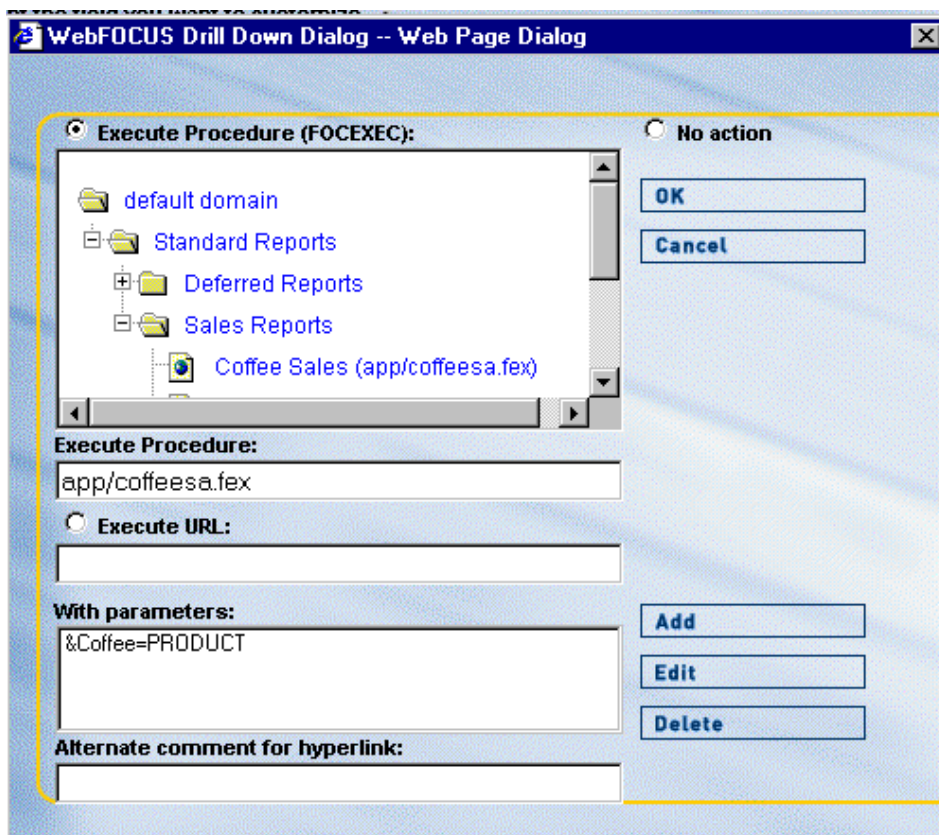**7.** Click *Add*. The Drill Down Parameter Dialog box opens.

8. Enter the name of the parameter you created in the drill down procedure in the Parameter Name text box, for example, Coffee.

Note: When passing parameters to a drill-down procedure, you must use local amper variables (&variables). Global amper variables (&&variables) cannot be used as drill-down parameters. Also, when entering your parameter name it is not necessary to type an ampersand (&) before the parameter name. This will create a global amper variable that cannot be used as a drill-down parameter.

9. When you pass the parameter to the drill down procedure, you must set a value for it in the Drill Down Parameter Dialog box. If you select:

- **Field.** The parameter will be set to the corresponding value of the object the user drills down on in the specified field.

- **Constant value.** The parameter is set to the specified value.

Note: If the drill-down report contains a -DEFAULTS statement that sets a default value to the same amper variable passed from the main report, the amper variable value passed down overwrites the -DEFAULTS statement in the target procedure.

10. Once a value has been supplied, click *OK* to return to the Drill Down Dialog box. The parameter is added to the With Parameters list box.

Applying Predefined StyleSheets

You can select a predefined StyleSheet from Report Assistant, instead of applying custom styling. A predefined StyleSheet is a StyleSheet that a WebFOCUS Administrator creates or imports and stores in a WebFOCUS domain. Any user who then accesses Report Assistant from the domain can apply the predefined StyleSheet to their report.

You apply a predefined StyleSheet to a report from one of Report Assistant's style dialog boxes. The following graphic shows the Report Style dialog box. This Report Style dialog box is similar to the Styles for All Fields and Styles for Field dialog boxes.
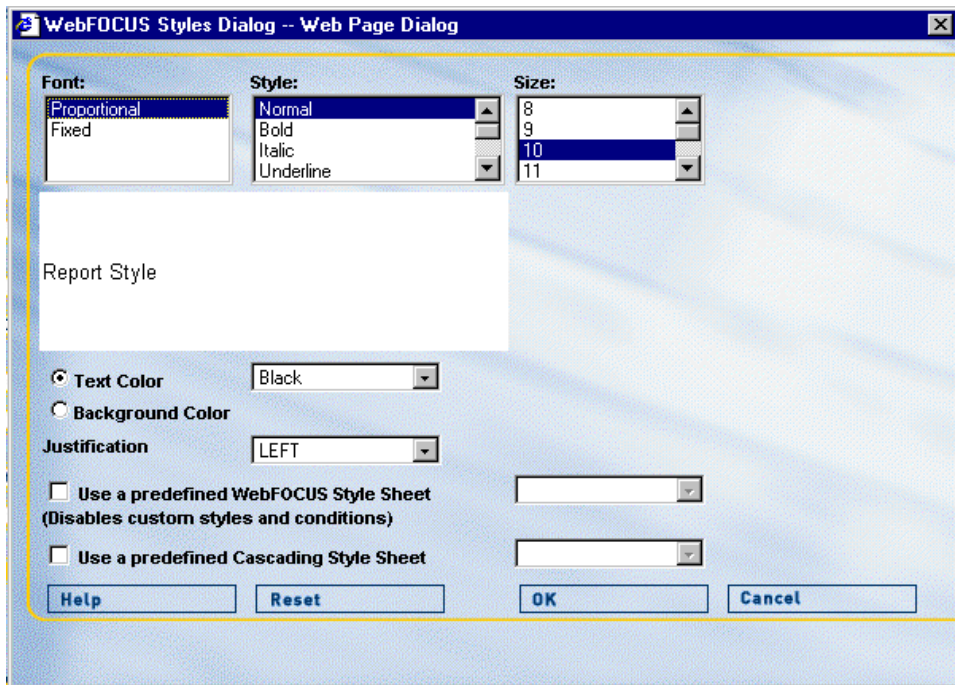
In addition to the customized styling options offered, the dialog box includes the Use a predefined WebFOCUS Style Sheet and Use a predefined Cascading Style Sheet check boxes and their corresponding drop-down lists. To apply a predefined StyleSheet to a report, you click the check box and select a StyleSheet from the drop-down list. The drop-down list includes all StyleSheet files stored in the domain.

If you apply a predefined StyleSheet to a report, Report Assistant disables all customizable styling options and does not apply any previous styling selections for the entire report. These settings are not lost. If you decide not to apply the predefined StyleSheet, Report Assistant restores the report's original styling settings and allows you to further customize a report's styling.

Procedure **How to Apply a Predefined StyleSheet to a Report**

Before you can apply a predefined StyleSheet to a report, a Managed Reporting Administrator must add StyleSheet files to a domain's Other File component.

1. Access one of Report Assistant's Style dialog boxes.

2. Click the *Use a predefined WebFOCUS Style Sheet* check box.

   Report Assistant disables all customizable styling options.

3. Select the predefined StyleSheet you want to apply to the report from the StyleSheet drop-down list.

4. Click *OK* to accept your choice.

Justification

Report Assistant includes a Justification drop-down list with the options of Left, Right, and Center. This ability is important for international languages that are read from right to left (for example, Hebrew). You can justify a single field, all fields, or the entire report.

Example **Justifying a Single Field in a Report**

In the following example, the Country field will be center justified when the report is run.

1. In the Fields Options tab, click the *Country* field.

2. Under Styling options, click *Field*. The Styles for the field Country window opens:
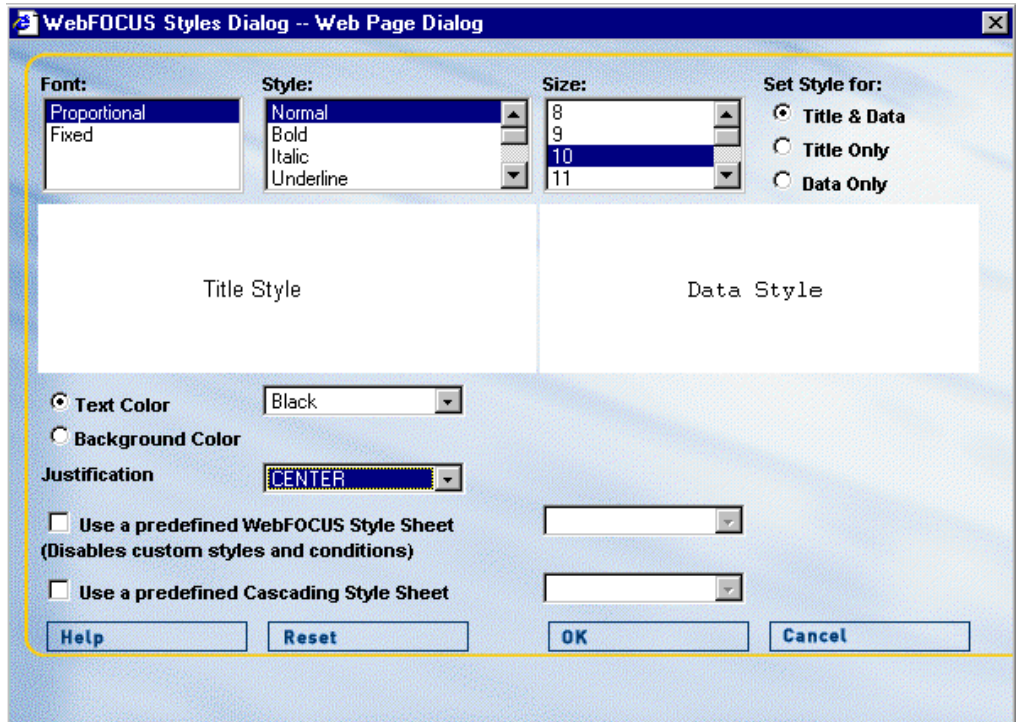
3. In the Justification drop-down list, select *Center*.

4. Click *OK*.

5. Click *Save*. If it is a new report, name your report.

Procedure **How to Justify All Fields in a Report**

1. Under Styling options, click *All Fields*. The Styles for All Fields window opens:
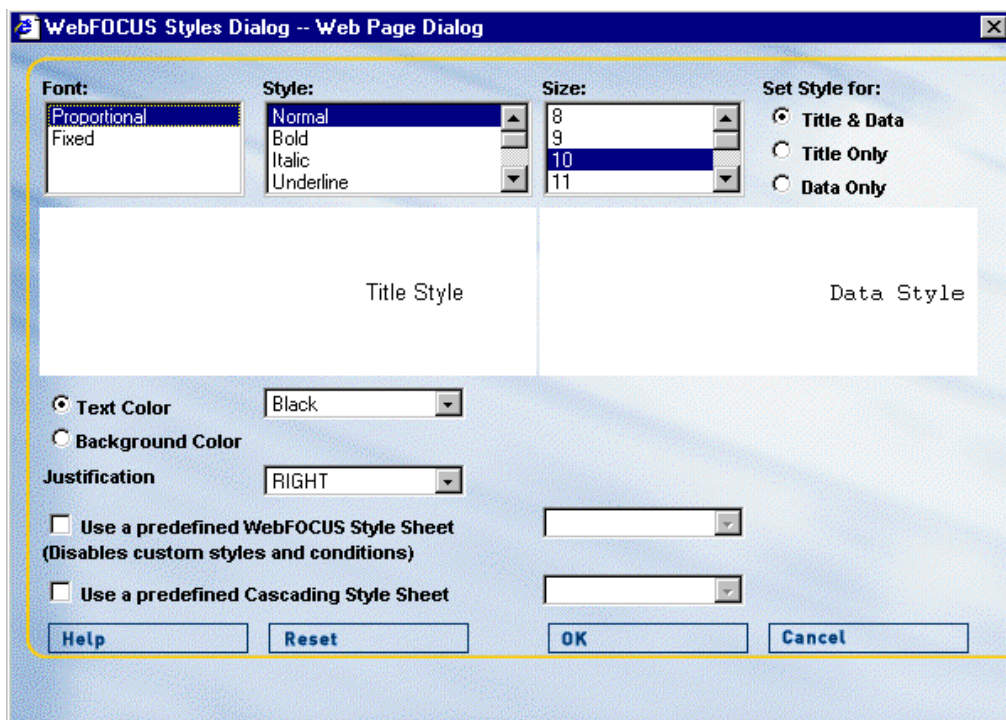
2. In the Justification drop-down list, select Left, Right, or Center.

3. Click *OK*. The Field Options window displays again.

4. Click *Save*. If it is a new report, name your report.

Customizing Headings and Footings

You can create headings and footings for your report by using the Headings tab to specify the content, style, and placement of headings and footings in your report.
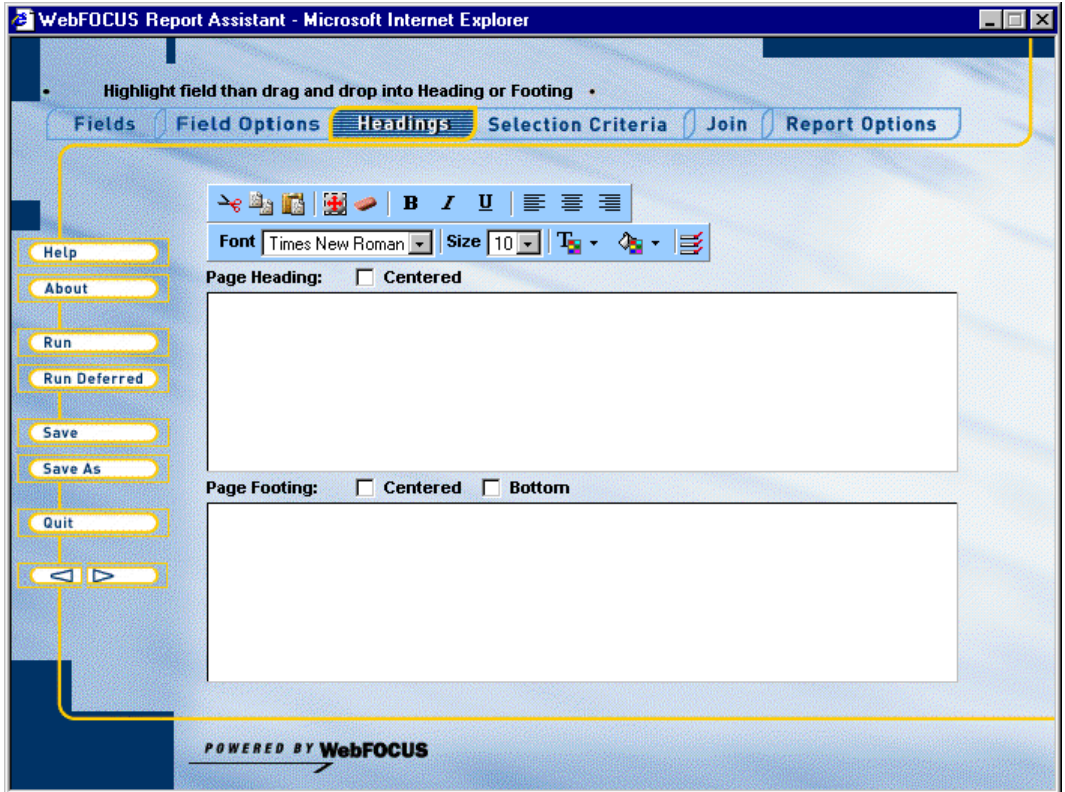
Procedure **How to Add and Align a Heading in a Report**

1. In the Headings tab, enter heading text inside the Page Heading box.

2. Click the Center icon or the *Centered* check box to center the heading in the report. The heading is left-aligned by default.

   Note: The Centered check box is available for upward compatibility.

Procedure **How to Add and Align a Footing in a Report**

1. In the Headings tab, enter footing text inside the Page Footing box.

2. Click the Center icon or the *Centered* check box to center the footing on the report. The footing is left-aligned by default.

    Note: The Centered check box is available for upward compatibility.

3. Click *Bottom* to place the footing at the bottom of the report.

Procedure **How to Include a Field in a Heading or Footing**

You can include a specified field in a heading or footing. When you run the report, the data value for the field will be included in the heading or footing. To indicate a field in a heading or footing:

1. Click the Fields icon in the Headings toolbar. A Fields list window appears to the right of the Headings tab.

2. Select a field from the Fields List window.

3. Click and drag the field to the Page Heading or Page Footing box.

Note:

•   You can add more than one field name to either the Page Heading or Page Footing box by selecting one field at a time.

•   The report's heading or footing will contain the first value retrieved for the field in the heading or footing.

Procedure **How to Style a Heading or Footing**

1. Select the field you want to style in the Heading Styles box or the Footing Styles box in the Headings tab.

2. Cut, copy, and paste text by clicking the respective icons on the toolbar.

   Note: When copying and pasting text that has been previously centered, the Centered check box may not be checked even though the text displays as centered in your report output. If you do not want the text to be centered, click the Center icon.

3. Click the appropriate icons to bold, italicize, or underline your text.

4. Click the left, center, or right justification icons to specify justification.

5. Click the drop-down lists for Font and Size to specify your selections.

6. Click the *Text Color* icon and choose a color from the color drop-down list.

7. Click the *Background Color* icon and choose a color from the color drop-down list.

8. Click *Save* or *Save As* to save your settings.

Note: The default styling settings are as follows:

- Font: Times New Roman

- Size: 10

  Note: If you change the font size of your heading (FOCUS titles), the code may not properly reflect the font size you specified when you open the procedure in a text editor. This does not affect functionality. You can edit the procedure manually to correct the size.

- Style: Normal

- Text Color: Transparent

- Background Color: Transparent

- Justify: Left

Selecting Records for a Report

When generating a report and specifying which fields to display, you may not want to display every instance of a field. By including selection criteria, you can display only those field values that meet your needs. In effect, you can select a subset of the data, a subset that you can easily redefine each time you issue the report request.

When developing a report request, you can define criteria that select records based on:

- The values of an individual field (using a WHERE statement).

- The aggregate value of a field, for example, the sum or average of a field's values (using a WHERE TOTAL statement).

The Selection Criteria tab enables you to create WHERE or WHERE TOTAL statements for record selection.

Creating a WHERE Statement

WHERE statements enable you to display only those records that pass your selection criteria. The WHERE statement selects the data source records to be included in a report. The data is evaluated according to the selection criteria before it is retrieved from the data source. Use the Selection Criteria tab to create a new WHERE statement.

Procedure **How to Select Records Based on Values, Parameters, and Fields**

1. Select a field from the Fields tree and drag the field to the right frame. The field name and <Select expression> and <Select values> will display in the right frame, prefixed by a green check mark.
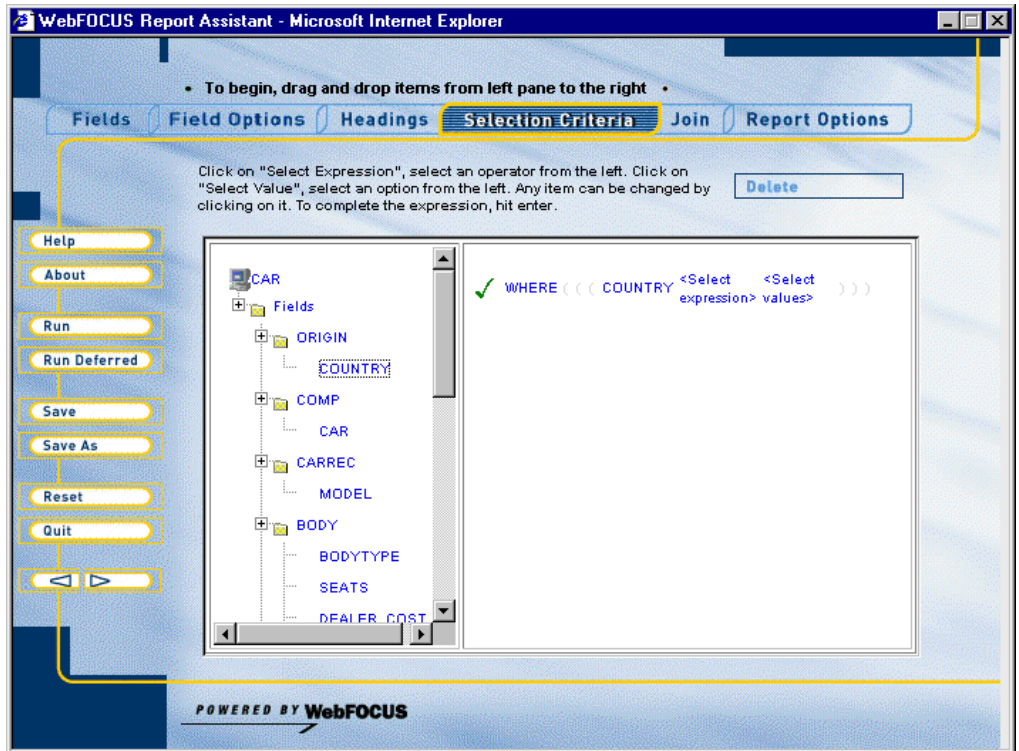
Note:

- You can replace the field you selected by clicking on the field in the expression and then double-clicking the new field in the tree. Your new selection automatically appears in the expression.

- The Fields list will be in tree format. If filters exist, they will be listed prior to the tree listing of the file.

2. Click *<Select expression>* in the right frame to display a list of operators in the left frame:
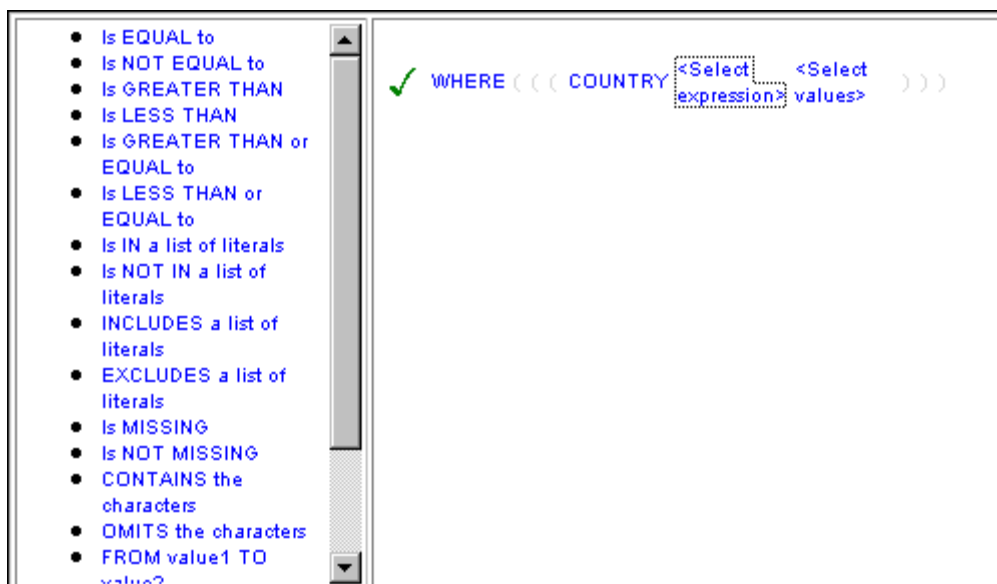
3. Click the expression of your choice.

4. Click *<Select values>* to complete the expression.

WHERE (((COUNTRY EQ <Select values>)))

- Enter Value
- Retrieve Values
- Parameter
- Fields

5. Compare type options will display in the left frame:

- **Enter or Retrieve Value.** Select to generate a list of values for that field and display an edit box to type in the value.

- ENGLAND
- FRANCE
- ITALY
- JAPAN
- W GERMANY

WHERE (((COUNTRY EQ <Select values>)))

- **Parameters.** Select to display an Edit box to enter the name of the &variable. Click *Add* to complete the expression.

- **Fields.** Select to regenerate the fields list from which to choose.

Combining Expressions

Use the right frame of the Selection Criteria tab to activate or delete existing WHERE statements and to combine expressions.
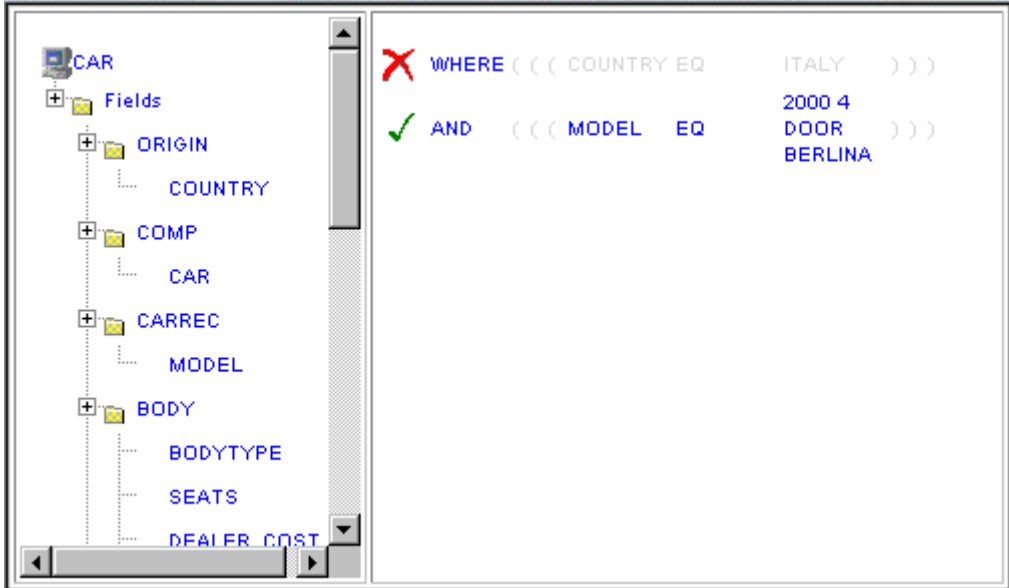
Procedure **How to Combine Expressions**

1. Create an expression.

2. When you create additional expressions, they are combined with the default operator AND.

3. Toggle between AND, OR, WHERE, and WHERE TOTAL by clicking the AND to make your choice.

Procedure **How to Delete an Active Expression**

1. Click the green check next to the expression you want to delete. A red X appears.

2. You can toggle back and forth to activate. To clear the expression(s) marked for deletion, click *Delete*.

Procedure **How to Activate a Deleted Expression**

1. Click the red X next to the expression you want to activate. The red X will change to a green check, activating the expression. You can toggle back and forth to activate.

2. If you click *Delete*, the expression will be deleted, and you can no longer activate the expression.

Note: If parentheses are used in an expression, all will be inactive. You must regroup your expression.

Grouping Expressions Together With Parentheses

You can use parentheses to group expressions together to optimize the WHERE statement.

Procedure **How to Group WHERE Statements Together Using Parentheses**

Click the grayed out parentheses to activate the parentheses and group expressions together.

Limiting Data With Filters

Filters enable you to quickly select pre-defined criteria that limit data included in a report. Filters are selection criteria (WHERE statements) that an Administrator creates for you to apply as needed, without having to create your own selection criteria. Filters are listed above the file in the left frame of the Selection Criteria tab.

WebFOCUS displays filters in filters groups. Each filter group can contain multiple filters. Selecting a single filter within one group creates a report with simple filtering criteria. By selecting multiple filters within a group or combining filters from different groups, you can create complex filtering expressions.

Simple Filtering Criteria

Simple filtering criteria consists of one or more filters from the same filter group. If you select only one filter, the data must match that filter to be included in the report. If you select multiple filters from the same filter group, data must match only one filter to be included in the report. This type of criteria is an OR criterion.

Complex Filtering Criteria

Complex filtering criteria consists of one or more filters from multiple filter groups. Data must match one filter from each filter group to be included in the report. This type of criteria is an AND criterion.

Procedure **How to Add a Filter to a Report**

Drag and drop the filter of your choice from the left frame to the right frame.

Selecting Records With LIKE and NOT LIKE Operators

Alphanumeric fields include the following operators:

- LIKE the character mask.

- NOT LIKE the character mask.

These operators generate the appropriate LIKE and NOT LIKE expressions using the character mask available in the expressions list when creating a WHERE statement.

Example   **Creating a Report Using the LIKE Operator**

To use the LIKE operator to list all employees that have an EMP_ID that starts with 1, has any value in the second position, and has a 9 in the third position, perform the following steps after you have selected your fields from the Fields tab:

1. Select the field *EMP_ID* and drag it to the right frame.

2. In the right frame, click *Select expressions.*

3. In the left frame, click *LIKE the character mask*.

4. In the right frame, click *Select values*.

5. In the left frame, click *Values* and enter 1_9% as the character mask value in the Value input box.

6. Click *Save*.

Joins

A join is a temporary connection between two or more data sources that share at least one common field. Once you join two data sources, each time WebFOCUS retrieves a record from the first data source (host file), it also retrieves the matching records from the second data source (cross-referenced file). For a full discussion about joining data sources, see the *Creating Reports With WebFOCUS Language* manual.

You use the Join tool to link data sources. The Join tool provides a graphical method for creating and manipulating joins.

When you access the Join tool, the window displays a field list for the data source (which you specified when you created the Standard Report or Reporting Object), and a field list for any data source you add to the window.

Note: Only Managed Reporting Administrators and Domain Admins have access to the Join tool. The Join tab is not available in self-service mode.

Procedure **How to Create a Join**

1. Click the Join tab in Report Assistant.
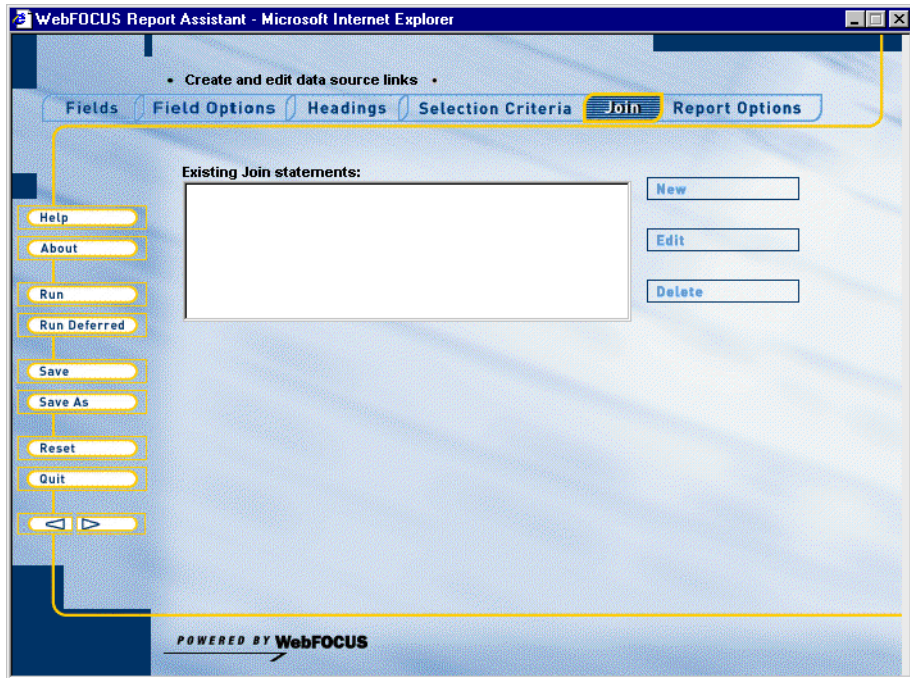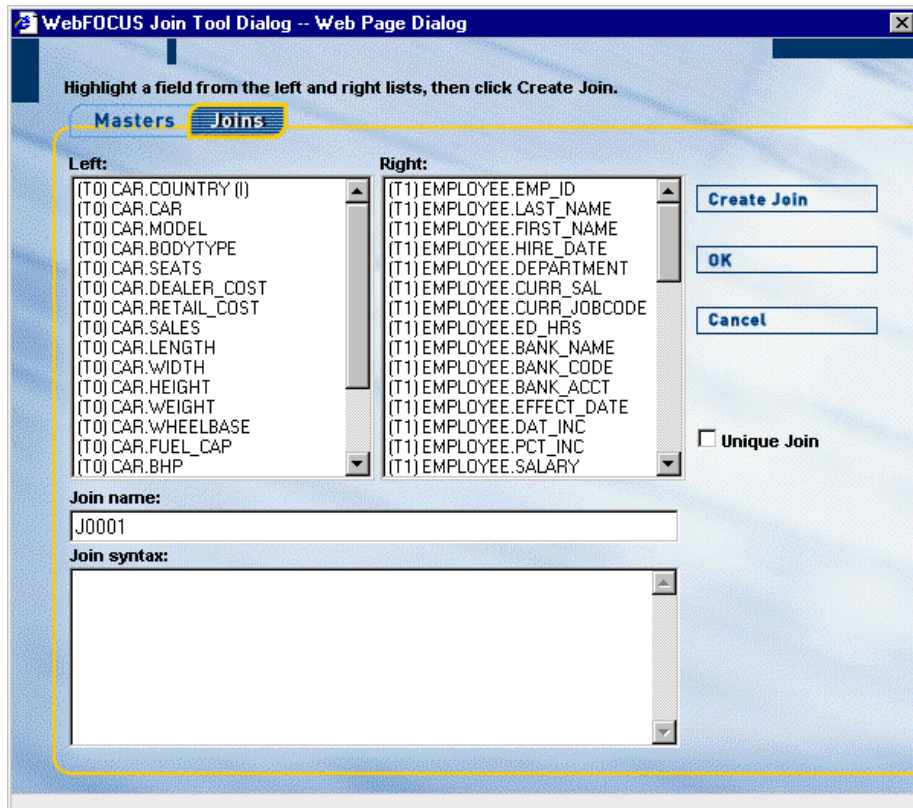
2. Click *New*. The Join Tool dialog box opens and displays the Master Files.
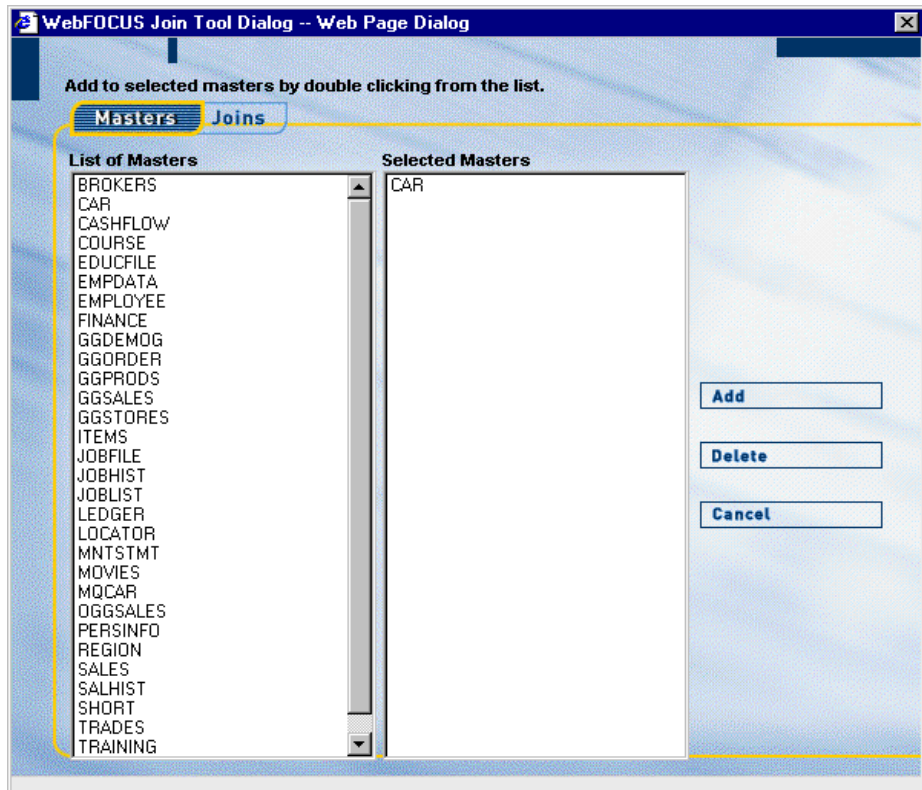
3. Select each Master File you want to add and click *Add*.
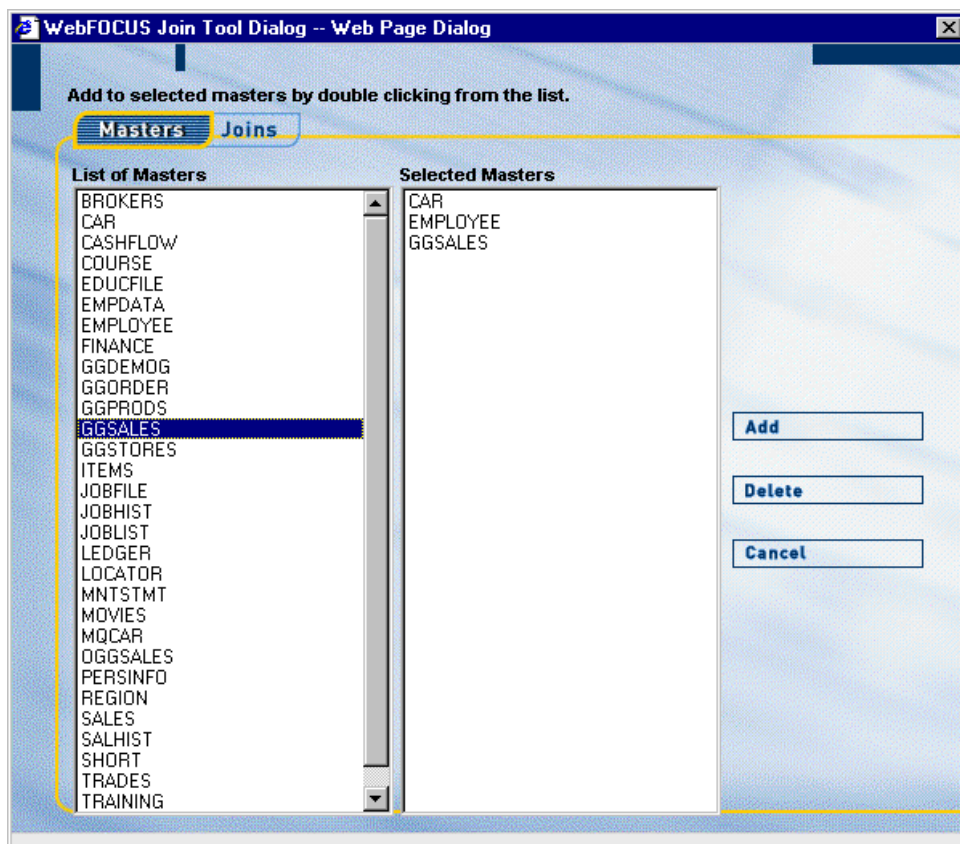
4. Once you have made your selections, click *Joins*. The following window opens:

5. Select your left and right joins and click *Create Join*. The Join name and Join syntax appear.
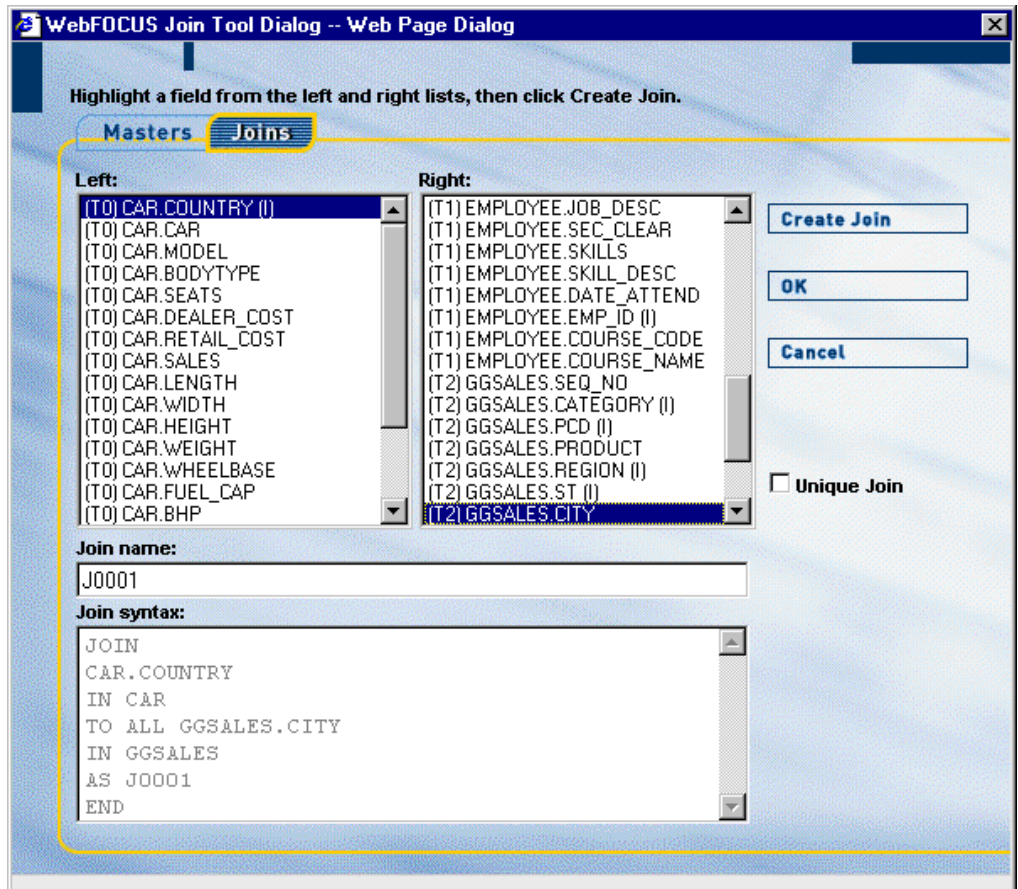
6. Give the Join a meaningful and unique name.

7. Click *OK*. The Existing Join statements list appears.

Procedure **How to Delete a Join**

1. Select a join from the Existing Join statements list.

2. Click *Delete*.

Procedure **How to Edit a Join**

1. Select a join from the Existing Join statements list.

2. Click *Edit*.

3. Make your desired changes.

4. Click *OK*.

Applying Other Report Options

The Report Options tab allows you to select from a variety of options for the output of your report, including:

• Saving a report to an output file.

• Specifying the page-numbering format.

• Setting record/read limits.

• Selecting totaling options.

• Entering a report title.

• Entering summary text.

• Enabling grid lines and On-demand Paging and generating internal Cascading Style Sheets (CSS).

• Using accessibility features.

• Enabling the AutoDrill or Drill Down on Measures features.

- Enabling the OLAP selections panel feature.
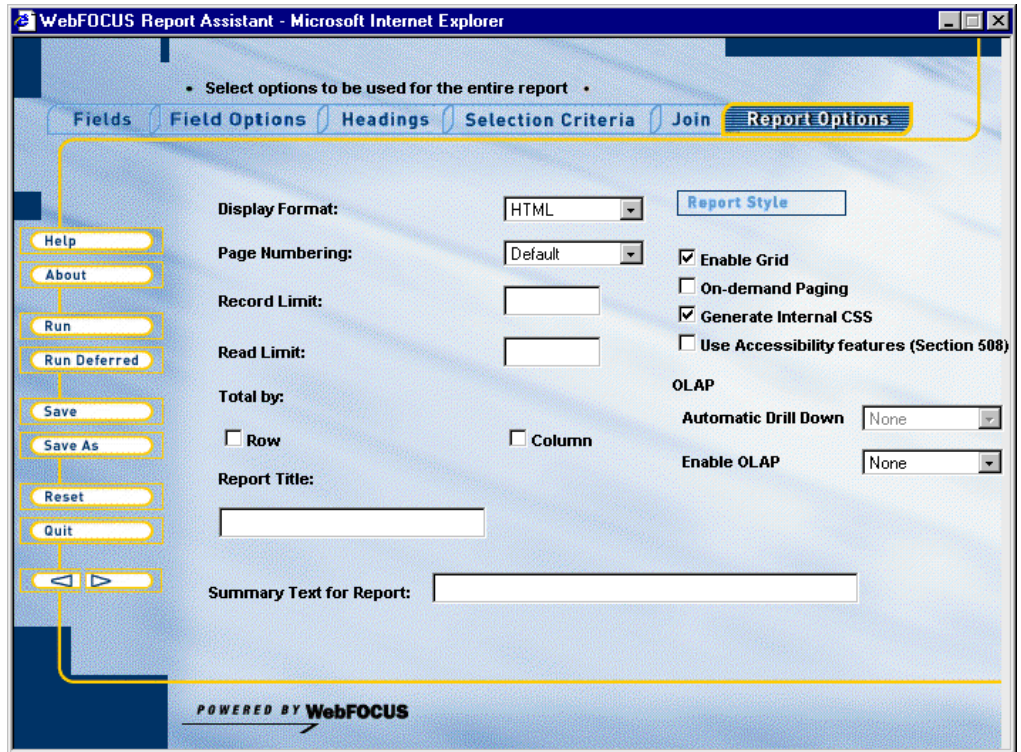
Procedure How to Save a Report to an Output File

The Display Format drop-down list offers a choice of file types for the report output. Select one of the following formats from the drop-down list:

- **HTML.** Creates the report in HTML, sending the output to the Web browser.

- **WP.** Captures the entire report—including headings, footings, and subtotals—and creates a character file that can be easily incorporated into most word processing packages.

- **DIF.** Captures the entire report output—excluding headings, footings, titles, subheads, and subfoots—and creates a character file that can be easily incorporated into most spreadsheet packages.

    For example, running a TABLE request with HEADING/FOOTING and ON TABLE PCHOLD FORMAT DIF does not display the report output with headings and footings. As a workaround, use another format (such as HTML, PDF, or EXL2K).

- **PS.** Creates the report as a postscript file.

- **LOTUS.** Captures all the columns of the report in a character file that LOTUS 1-2-3 can then import.

- **EXCEL.** Captures the entire report as a Microsoft Excel spreadsheet file with data and column titles, but does not include report headings and footings, subheads, or subfoots.

- **DOC.** Captures the entire report as a text file with layout and line breaks.

- **PDF.** Captures the entire report and creates a Portable Document Format (.PDF) file, which can be opened in the Adobe Acrobat Reader (Adobe's PDF viewer).

- **TABT.** Allows you to create file extracts that contain field names in the first row. Long field names are allowed.

- **EXL97.** Generates a report in Excel97 format.

- **EXL2K.** Generates fully styled reports in the Excel 2000 HTML format. Excel 2000 provides full support for HTML files with embedded XML.

- **WK1.** Captures the entire report as a Lotus 1-2-3 spreadsheet file.

Procedure **How to Specify Page Numbering Format**

The Page Numbering drop-down list offers several options for page numbering. Select one of the following from the drop-down list:

- **Default.** Numbers each page of the report in the format PAGE 1, PAGE 2, and so on. The default value is ON.

- **ON.** Numbers each page of the report in the format PAGE 1, PAGE 2, and so on.

- **OFF.** Suppresses the display of page numbers.

- **NOLEAD.** Suppresses the two leading blank lines included on each page by default.

Procedure **How to Set a Record Limit or Read Limit**

To limit the number of records retrieved when reporting from a FOCUS data source, enter a number greater than zero in the Record Limit box.

To limit the number of records retrieved when reporting from a non-FOCUS data source, enter a number greater than zero in the Read Limit box. A read limit specification is ignored when reporting from a FOCUS data source.

Procedure **How to Include a Row or Column Total**

You can total records in your report by row, by column, or by row and column. Select the *Row* check box and/or the *Column* check box under the Total by option.

Procedure **How to Include a Report Title**

You can specify a report title in the Report Title field that will appear in the title bar of your report.

Procedure **How to Include a Summary Text for a Report**

You can specify summary text for your report in the Summary Text for Report field. This will place a description of the output into a SUMMARY object inside the output HTML TABLE. The length limit of this summary is 500 characters. If you try to set the SUMMARY to more than 500 characters, you will receive the following message:

```
Limit on length of summary is 500 characters.
```

Procedure **How to Style the Entire Report**

1. Click *Report Style* on the Report Options tab. The Styles dialog box opens:
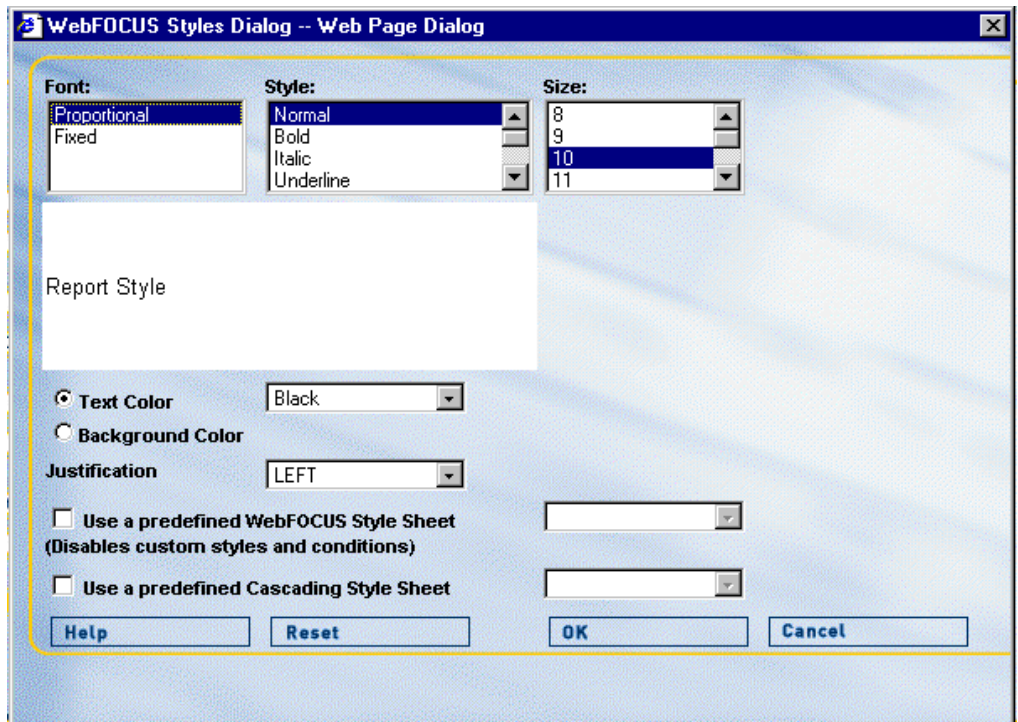
2. Select styling options from the Font, Style, and Size boxes.

3. Select a text color from the Text Color drop-down list.

4. Select a background color from the Background Color drop-down list.

5. Select a justification from the Justification drop-down list.

6. Click *OK*.

Note: Clicking *Reset* returns the styling options to the following default settings:

- Font: Proportional

- Style: Normal

- Size: 10

- Text Color: Black

- Background Color: Transparent

- Justification: Left

Procedure **How to Style a PDF or PostScript Report**

When you select PDF or PostScript (PS) as the display format for a report, WebFOCUS offers several additional styling features.

1. Select *PDF* or *PS* from the Display Format drop-down list.

2. Click *Report Style*. The Styles dialog box opens.

3. Select a font. Choose from Courier, Times, or Helvetica.

   WebFOCUS uses this selection as the display font for report output.

4. Click the Orientation drop-down list to select either *Portrait* or *Landscape* page orientation.

   Note: This option is only available when you select PDF as the report format.

5. Click the Page Size drop-down list to select the page size for the report. You can select from the following sizes:

   - **Letter.** Sets the page size to 8.5 x 11 inches.

   - **Legal.** Sets the page size to 8.5 x 14 inches.

   - **11 x 17.** Sets the page size to 11 x 17 inches.

   - **A3.** Sets the page size to 11.69 x 16.54 inches.

   - **A4.** Sets the page size to 8.26 x 11.69 inches.

   Note: This option is only available when you select PDF or PS as the report format.

6. Click *OK*.

   You return to the Report Options tab.

Procedure **How to Justify an Entire Report**

The following procedure describes how to justify an entire report. This affects headers, footers, fields, and field headings.

1. Click *Report Style.* The Styles window opens.

2. In the Justification drop-down list, select Left, Right, or Center.

3. Click *OK.*

Procedure **How to Enable Grid Lines**

You can include grid lines that separate cells of data in your report.

1. Select *HTML* in the Display Format drop-down list.

   You can only enable grid lines for reports that use the HTML format.

2. Click the *Enable Grid* check box (enabled by default).

3. Save and run the report.

Procedure **How to Enable On-Demand Paging**

1. Select *HTML* in the Display Format drop-down list.

   You can only use On-demand Paging for reports that use the HTML format.

2. Click the *On-demand Paging* check box.

3. Save and run the report.

   WebFOCUS displays the first page of the report in the WebFOCUS Viewer.

Procedure **How to Generate Internal Cascading Style Sheet Code**

When you check Generate Internal CSS in the Report Options tab of Report Assistant, your report will reflect the styling options you select, and generate Internal Cascading Style Sheet code in the HEAD tag of HTML reports. This feature is available only if you select HTML in the Display Format drop-down list.

If the Generate Internal CSS option remains checked (default), changes you make in the Heading or Footing from the Headings tab will not be reflected when you run your report. However, if you uncheck this option, your report will reflect the styling options you selected in your Heading and Footing in the Headings tab.

Procedure **How to Enable AutoDrill or Drill Down on Measures**

From the Automatic Drill Down drop-down list, you can select DIMENSIONS to turn on AutoDrill, or ALL to turn on Drill Down on Measures.

Procedure **How to Enable the OLAP Interface**

You can enable the OLAP interface when you select TOP, BOTTOM, or HIDDEN from the Enable OLAP drop-down list. You can set the Run with OLAP property when you select CONTROL, TOP, BOTTOM, or HIDDEN.
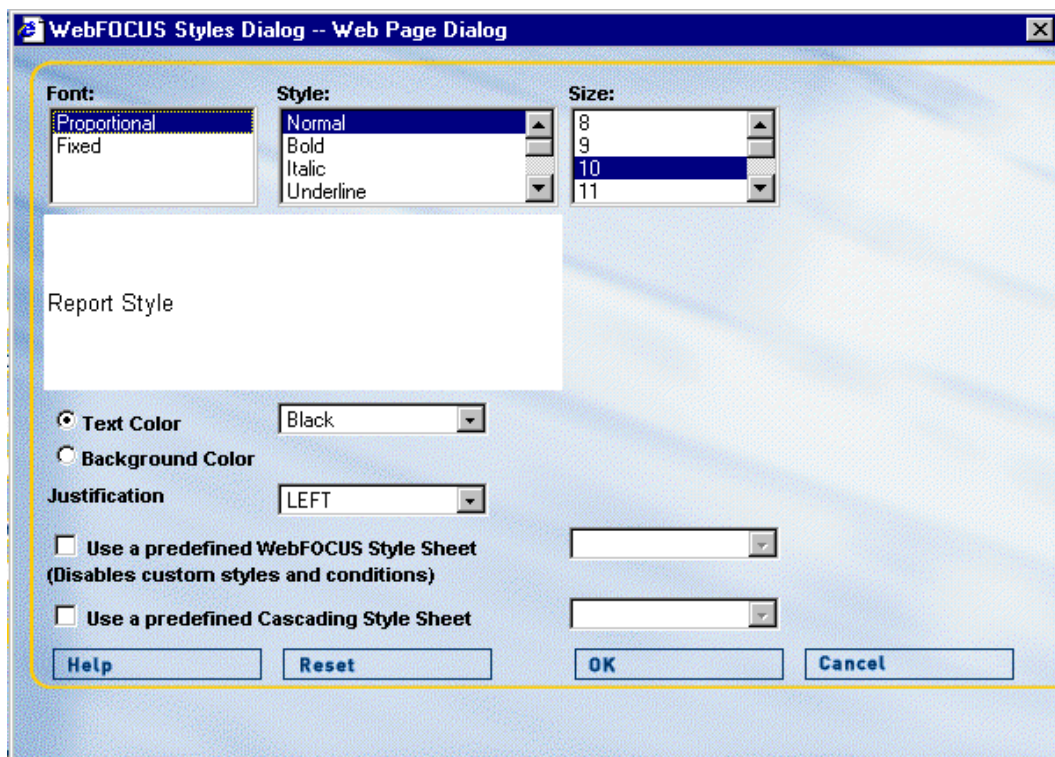
Applying Cascading Style Sheets

In Domain Builder, a Managed Reporting Administrator or Domain Admin can create a Cascading Style Sheet (CSS) file in the Other Files folder of a specific domain as a predefined CSS style. Managed Reporting users can then apply this style to a Standard Report using Report Assistant.

In Report Assistant, you can select predefined CSS files from the following tabs:

- **Field Options** using the Field, Conditional, and All Fields buttons.
- **Report Options** using the Report Style button.

The following displays the Report Style window, which is accessed from the Report Options tab.

This window has the check boxes called Use a predefined WebFOCUS Style Sheet and Use a predefined Cascading Style Sheet.

Note: These check box options are the same regardless of how you access the CSS files (Field Options or Report Options tab). The default values for the Use a predefined WebFOCUS Style Sheet and Use a predefined Cascading Style Sheet check boxes are blank.

Reference   **CSS Check Box Behavior**

You may use a CSS file alone or in combination with a WebFOCUS Style Sheet file. The behavior is as follows:

- When you check only Use a predefined Cascading Style Sheet, all styling options in the Field Options tab and Report Options tab are available.

- If you check both Use a predefined WebFOCUS Style Sheet and Use a predefined Cascading Style Sheet, no styling options are available.

Using a CSS File

The following is an example of the contents of a .css file located in the Other Files of a Managed Reporting domain. The .css file may be created using the editor or by importing it into Managed Reporting:

```
BODY {BACKGROUND-COLOR: BLUE;}
TD {COLOR: YELLOW;}
```

Selecting Use a predefined Cascading Style Sheet for this .css file will generate the following syntax:

```
-* Created by Report Assistant
-* FF Line do not change this line! Field Name
-* FF Line do not change this line! Alias
-* FF Line do not change this line! Format
-* FF Line do not change this line! Segment
-* FF Line do not change this line! Colno
TABLE FILE CAR
SUM COUNTRY RETAIL_COST CAR
ON TABLE SET STYLE *
CSSURL=app/bodyblue.css, $
ENDSTYLE
END
-* End Report Assistant
```

Using a WebFOCUS Style Sheet File With a CSS Reference

The following is an example of the contents of a WebFOCUS Style Sheet File (class.sty) located in the Other Files of a Managed Reporting domain. The class.sty file may be created using the editor or by importing it into Managed Reporting:

```
CSSURL=http://cherylh/ibi_html/format.css ,$
TYPE=DATA, COLUMN=COUNTRY, CLASS=italcol ,$
TYPE=DATA, COLUMN=COUNTRY, SIZE=12, COLOR=YELLOW ,$
```

The format.css file contains the following format values:

```
BODY {BACKGROUND-COLOR: BLUE;}
.columntitle {font-family: helvetica; font-weight: bold; color: blue;}
.italcol {font-style: italic}
.12pt {font-size: 12pt;}
.bfield {font-weight: bold;}
```

Selecting Use a predefined Cascading Style Sheet for this .css file will generate the following syntax:

```
-* Created by Report Assistant
-* FF Line do not change this line! Field Name
-* FF Line do not change this line! Alias
-* FF Line do not change this line! Format
-* FF Line do not change this line! Segment
-* FF Line do not change this line! Colno
TABLE FILE CAR
SUM COUNTRY RETAIL_COST CAR
ON TABLE SET STYLE *
-INCLUDE app/class.sty
ENDSTYLE
END
-* End Report Assistant
```

Running a Report

You may periodically run a report as you create it as well as when you have finished creating it.

Procedure **How to Run a Report**

1. Click *Run* on any of the Report Assistant tabs. The report displays in a separate browser session.

2. To return to Report Assistant, close the browser window displaying the report.

Note:

• You can continue to make changes to your existing report procedure or create another report by clicking *New*.

• If you click *New*, your current report procedure is not saved. If you want to save your existing report, click *Save* before you click *New*.

Saving a Report

You can save any report you create by clicking Save on the Report Assistant window. WebFOCUS saves the report to the My Reports tab in the Domains Interface. If you want to rename your report after it has been saved, click *Save As* in Report Assistant and type a new name in the input box.

Note: This option is not available in self-service mode.

Procedure **How to Save a Report**

1. Click *Save* on any of the Report Assistant tabs, or

2. Exit from Report Assistant. One way to do this is by clicking *Quit* on the tab.

3. Click *Yes* when asked if you want to save the changes. You return to the Domains interface.

Editing a Report

When Report Assistant is loaded, any syntax error or parsing error in the request is highlighted in the code. A request originally created with Report Assistant that is later modified using an editor may have been coded with something that Report Assistant does not understand. In this case, you will not be able to parse it until you have fixed the error.

Procedure **How to Edit a Report**

1. Click *Open* to start Report Assistant. The Error in the request window opens:

```
Error in the request!                                          _ □ ×
IF CAR= MUSTANG
^^-------------------------------------------------------------------
SUM MODEL
BY CAR
ON TABLE SET STYLE *
TYPE=REPORT, GRID=OFF, $
ENDSTYLE
END
-* End Report Assistant
-----
Encountered "IF CAR =" at line 8, column 1.
Was expecting one of:
    "END" ...
    "HEADING" ...
    <dqstr> ...
    "FOOTING" ...
    "SUM" ...
    "WRITE" ...
    "LIST" ...
    "COUNT" ...
    "PRINT" ...
    "BY" ...
    "RANKED" ...
    "ACROSS" ...
    "ON" ...
    "AFTER" ...
    "FOR" ...
    "WHERE" ...
    "IF" "TOTAL" ...
    "IF" <ident> "EQ" ...
    "IF" <ident> "IS" ...

              [ Parse it ]              [ Quit ]
```
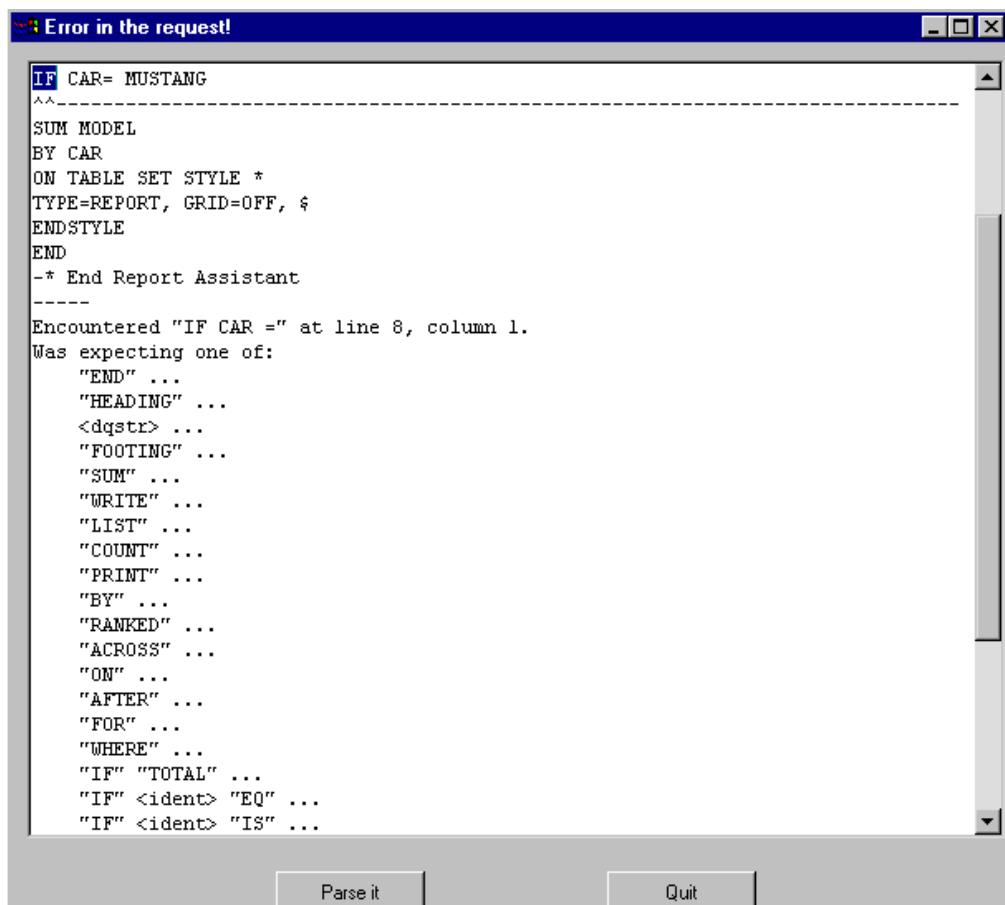
2. You will not be able to click Parse it as is. You must either fix the error manually, and click Parse it, or click Quit. Clicking Quit opens the Message dialog box:

```
Message                        _ □ ✕

Parser has identified an error in the request.
Select OK to load a modified version of the
request.


        OK              Cancel

Warning: Applet Window
```
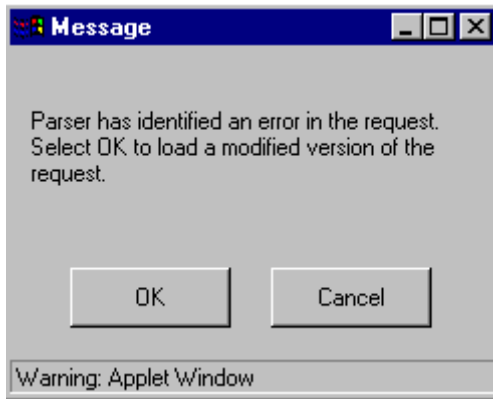
3. Click *OK* to load a version of the report that does not contain the incorrect syntax. For example:

```
Car by Country                                             _ □ ✕
File  Edit  Help
-* Created by Report Assistant
-* FF Line do not change this line! Field Name
-* FF Line do not change this line! Alias
-* FF Line do not change this line! Format
-* FF Line do not change this line! Segment
-* FF Line do not change this line! Colno
TABLE FILE CAR
SUM MODEL
BY CAR
ON TABLE SET STYLE *
TYPE=REPORT, GRID=OFF, $
ENDSTYLE
END
-* End Report Assistant






Warning: Applet Window
```
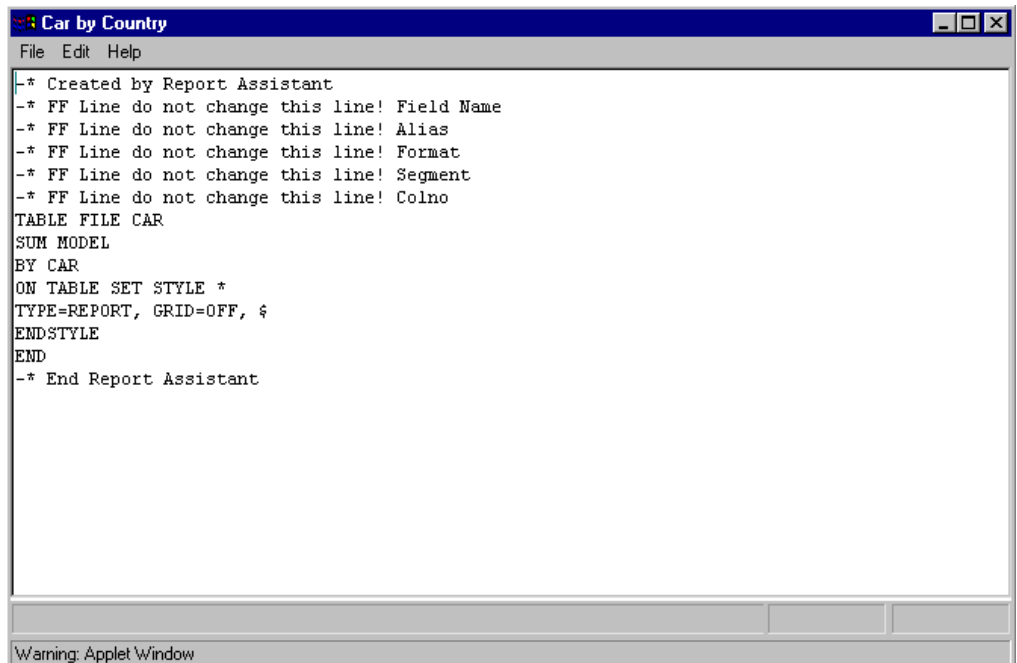
Creating a Graph With Graph Assistant

Topics:

- Content Analysis: Determining Graphing Objectives
- Selecting a Graph Type
- Selecting Values for the X and Y Axes
- Creating Multiple Graphs
- Refining the Data Set For Your Graph
- Displaying Missing Data Values in a Graph
- Linking Graphs to Other Resources
- Adding Labels to a Graph
- Applying Custom Styling to a Graph
- Running, Saving, and Printing Your Graph

Graphs often convey meaning more clearly than data listed in tabular format. Using the Graph Assistant, you can easily transform almost any type of data into an effective graph that you can customize to suit your needs.

You can link your graph to other resources. You may also select from a multitude of graph styles, which include the standard graph formats bar, line, pie, and scatter as well as many variations on these types.

You can also represent data graphically using data visualization. For details, see Chapter 9, *Visualizing Trends in Reports*.

Note that the Graph Editor is not supported in the HTML Graph Assistant.

This documentation covers the HTML Graph Assistant. For details on using the Java applet version of the Graph Assistant, see the *Creating Reports With Graphical Tools* manual.

Content Analysis: Determining Graphing Objectives

WebFOCUS offers a range of reporting tools that allow you to create reports that deliver critical information to your users. By selecting a tool that is well suited to your particular needs, you can design the information you deliver to users. One effective option with almost any type of data is a graphic presentation.

Graphs allow you to display multivariate or complex data efficiently, precisely, and in a way that a viewer can intuitively grasp. A graph is an effective presentation tool because it presents a visual idea, communicating meaningful changes in data to a user in a memorable way. By viewing your graph, a user can identify and track a change that you want them to notice.

Creating a meaningful graph is not simply a matter of applying aesthetics to your data. Instead, graphs allow you to design your presentation to capture the essential information in your data.

The first step in creating excellent graphics is determining your graphing objectives. You can break this process into several stages.

1. Assess your data:

   Look for meaningful patterns or changes in the data. Does your data change most dramatically over time or in relationship to some other value? Are there two sets of data that you would like to compare to each other?

   Determine what movement or changes you would like to highlight. Which of the patterns in the data would you most want the viewer to picture?

2. Select the graph type that best suits your argument and the overall shape of your data. Determine what will lead viewers to the cognitive task/connection that you want them to make.

3. Begin developing your graph.

4. Refine your graph:

   Are the labels meaningful/useful?

   How can the data be organized in a meaningful way? Consider customizing the scales you use with your graph.

Accessing the Graph Assistant

HTML Graph Assistant is accessible from the following locations:

- Through Dashboard.

- During the creation of a new Standard Report.

- When a report is selected during the creation of a Reporting Object.

- When editing a Reporting Object within Domains.

- When editing a My Report within Domains.

To use HTML Graph Assistant, you must have ServletExec 4.1 configured to include the IBIRPASSTBean.jar file and you must have JDK 1.3.1 or higher. JRE alone is not sufficient.

For details on all parameters required for the HTML Graph Assistant, see the *Managed Reporting Development and Administration* manual.

You may be prompted for a WebFOCUS Reporting Server ID.

Selecting a Graph Type

When creating a graph, it is important to select the appropriate graph type with which to display your data. You may select from a number of basic graph types, as well as refinements on these types. The basic graph types include line graphs (connected point plots), bar graphs, pie graphs, and scatter graphs. Use the brief descriptions (see *Graph Types* on page 6-4) to select a graph type that suits the data set you are displaying and the change you want to highlight. Keep in mind that the data are the sets of numbers that you are displaying, and the scales are the numbers or variable measures displayed along the axes of the graph.

The Styles tab of the Graph Assistant provides a list and brief descriptions of the many graph types and styles available in WebFOCUS.

Note: When using a stacked chart of any type at least 2 series are required.
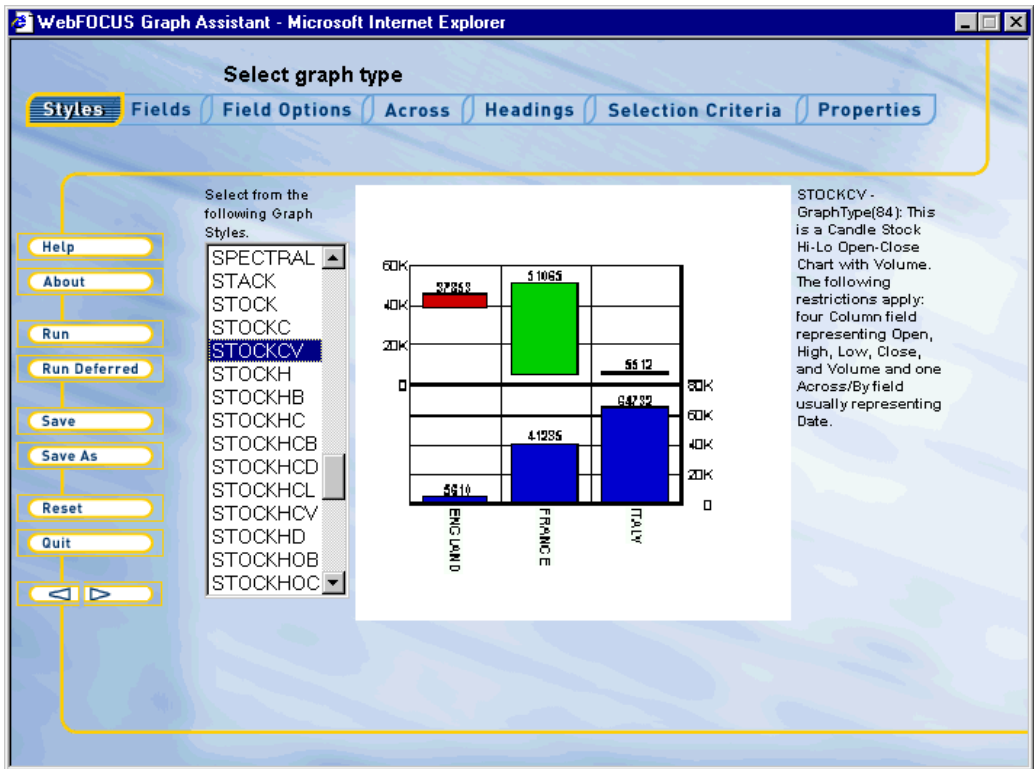
Graph Types

Following are descriptions of the types of graphs you can create:

- **Line graphs.** Line graphs are useful for emphasizing the movement or trend of numerical data over time, since they allow a viewer to trace the evolution of a particular point by working backwards or interpolating. Highs and lows, rapid or slow movement, or a tendency towards stability are all types of trends that are well suited to a line graph.

  Line graphs can also be plotted with two or more scales to suggest a comparison of the same value, or set of values, in different time periods. The number of scales your graph has depends on the type of graph you select. There is a description of each available graph type on the Styles tab of the Graph Assistant.

- **Bar graphs.** A bar graph plots numerical data by displaying rectangular blocks against a scale. The length of a bar corresponds to a value or amount. Viewers can develop a clear mental image of comparisons among data series by distinguishing the relative heights of the bars. Use a bar graph to display numerical data when you want to present distributions of data. You can create horizontal as well as vertical bar graphs.

- **Pie graphs.** A pie graph emphasizes where your data fits in relation to a larger whole. Keep in mind that pie graphs work best when your data consists of several large sets. Too many variables divide the pie into small segments that are difficult to see. Use color or texture on individual segments to create visual contrast.

- **Scatter graphs.** Scatter graphs share many of the characteristics of basic line graphs. Data can be plotted using variable scales on both axes. When you use a scatter graph, your data is plotted using a basic line pattern. Use a scatter graph to visualize the density of individual data values around particular points or to demonstrate patterns in your data. A numeric X-axis, or sort field, will always yield a scatter graph by default.

  It is important to note that scatter graphs and line graphs are distinguishable from one another only by virtue of their X-axis format. Line graphs can be displayed without connecting lines (making them appear like scatter graphs) and scatter graphs can be displayed with connecting lines (making them appear like line graphs).

- **Area graphs.** Area graphs are similar to line graphs except that the area between the data line and the zero line (or axis) is usually colored or textured. Area graphs allow you to stack data on top of each other. Stacking allows you to highlight the relationship between data series, showing how some data series approach or shadow a second series.

- **3D graphs.** 3D graphs add dimension to your graphing presentation. Dimensionality allows your viewers to recognize trends based on two or more data sets easily. 3D graphs also add impact to your presentation.

- **Bipolar graphs.** A bipolar graph is split along a horizontal line. This type of graph is useful for comparative trend analysis of widely disparate data values over time or other sort values.

- **Radar graphs.** This is a type of circular graph used when categories are cyclical. Radar graphs are essentially analogous to a line chart, except that the scale wraps around. Radar graphs work well with any data that are cyclical, such as the months of a year.

Procedure **How to Select a Graph Type**

1. Highlight a graph style from the Graph Styles list on the Styles tab of the Graph Assistant.

   A thumbnail image and a brief description of the graph are provided when you highlight a graph style. Be sure to read the description of the graph before selecting a graph style. Certain graph types require a particular number and/or type of data values; therefore, if your data does not satisfy the requirements then your graph will not accurately represent your data.

2. Once you have found the graph style you desire, click the right arrow to advance to the next tab, or click any of the tabs along the top of the Graph Assistant to continue creating your graph.

Selecting Scales

After you have chosen a graph type, you should select an appropriate scale. A scale is a classification scheme or series of measures that you select for application to the axes of your graph. The scale provides the framework against which your data are plotted. When you choose an appropriate scale for your data, meaningful patterns can emerge, and when you modify a scale, the overall shape of your graph changes.

Steps or measures in the scale are represented along the axes of your graph by marks. The type of scale you choose determines the number of divisions along the scale. There are two general types of scales you can apply to the y-axis of your graph:

• Linear scales

• Logarithmic scales

A linear scale is a scale in which the values increase arithmetically. Each measure along the scale is one unit higher than the one that precedes it. Linear scales are useful when the data you are plotting are relatively small in range.

A logarithmic scale is a scale in which the values increase logarithmically. Each measure along the scale represents an exponential increase in the data value. Logarithmic scales are useful when you need to accommodate a large range of numbers.

Procedure **How to Select Scales**

1. Click the Properties tab of the Graph Assistant.

2. Click *Y Axis*.

3. Find the *Log Scale* check box. When this option is checked, the Y-axis scale will use logarithmic scaling. When unchecked, the Y-axis scale will use linear scaling.

Selecting Values for the X and Y Axes

The values you select for the X- and Y-axes determine what data is displayed in the graph you are creating, and how it appears.

You can select and label the X and Y axes values from the Fields tab in the Graph Assistant.

You can also:

• Select a second horizontal category (X axis), which will produce multiple graphs. For details, see *Creating Multiple Graphs* on page 6-12.

- Temporarily hide the display of a Y-axis field. For details, see *Hiding the Display of a Y-Axis Field* on page 6-9.

- Interpolate X and Y axis values using linear regression.

Procedure How to Select Values for the Y-Axis

1. Click the *Fields* tab from the Graph Assistant.

2. Click the *List* or *Tree* radio button.

3. Highlight a field in the Fields box and then click the *Add* button to the left of the Value (Y) Axis group box to add it to the Value (Y) axis. You can also select a field (or fields) from the Fields list and drag and drop it to the Value (Y) axis.

   To add more than one field name at a time:

   a. Ensure the List radio button is selected.

   b. Click the field names you wish to include. The fields will highlight as you click on them.

    c. Drag and drop or use the *Add* button to add all the selected fields to the Value (Y) Axis group box.

Note: The display field(s) determines the vertical Y-axis of the graph. When the number of Y-axis labels is greater than one, the labels do not display along the Y-axis. Instead, the labels display in a legend that provides the names of the fields being graphed.

Procedure **How to Select Values for the X-Axis**

1. Click the *Fields* tab from the Graph Assistant.

2. Highlight a field in the Fields box and then click the *Add* button to the left of the Category (X) Axis group box to add it to the Category (X) axis. You can also select a field from the Fields list and drag and drop it to the Category (X) axis.

Reference **Graph Assistant Fields Tab**

Fields window

Displays a list of field names from the selected data source.

List

Displays a list of all field names with alias, format, and segment information.

Tree

Displays a tree structure of field names by segment with segment, alias, title, description, and format information below the tree. Individual field information displays when you click on the field.

Options

Use Alias -Uses the alias defined in the Master File as the field name

Prefix with Seg Name -Prefixes the field name with the segment name.

Prefix with File Name -Prefixes the field name with the name of the data source.

Value (Y) Axis

Lists the vertical (Y-axis) fields that have been added from the Fields window.

To move the position of the field within the graph, select the field in the Value (Y) Axis list and click the *Up* or *Down* button.

To delete a field, select the field in the Value (Y) Axis list and click the *Delete* button.

Title (Y-axis)

An optional title for the Y-axis may be entered here.

Y-Axis Values

Sum indicates a graph that aggregates data by the Category (X) axis field. This is the default.

Detail plots each Y-axis field value on a record-by-record basis. If the selected X-axis value is numeric, a scatter graph will be generated; if the selected X-axis value is alphanumeric, a line graph will be generated.

Category (X) Axis

Lists the horizontal (X-axis) field that has been selected from the Fields window.

Title (X-axis)

An optional title for the X-axis may be entered here.

Hiding the Display of a Y-Axis Field

You can hide the display of a Y-axis field in a graph. This is useful when you want to temporarily remove a particular Y-axis field, while retaining all of the original graph properties.

To temporarily hide a Y-axis field, use the Visible check box on the Field Options tab of the Graph Assistant. By default, the check box is selected for each Y-axis field. If there are no Y-axis fields, the check box is disabled.

Procedure **How to Hide the Display of a Y-Axis Field**

1. Click the *Field Options* tab of the Graph Assistant.

2. From the Value (Y) Fields box, highlight the Y-axis field you want to hide.

3. Deselect the *Visible* check box.
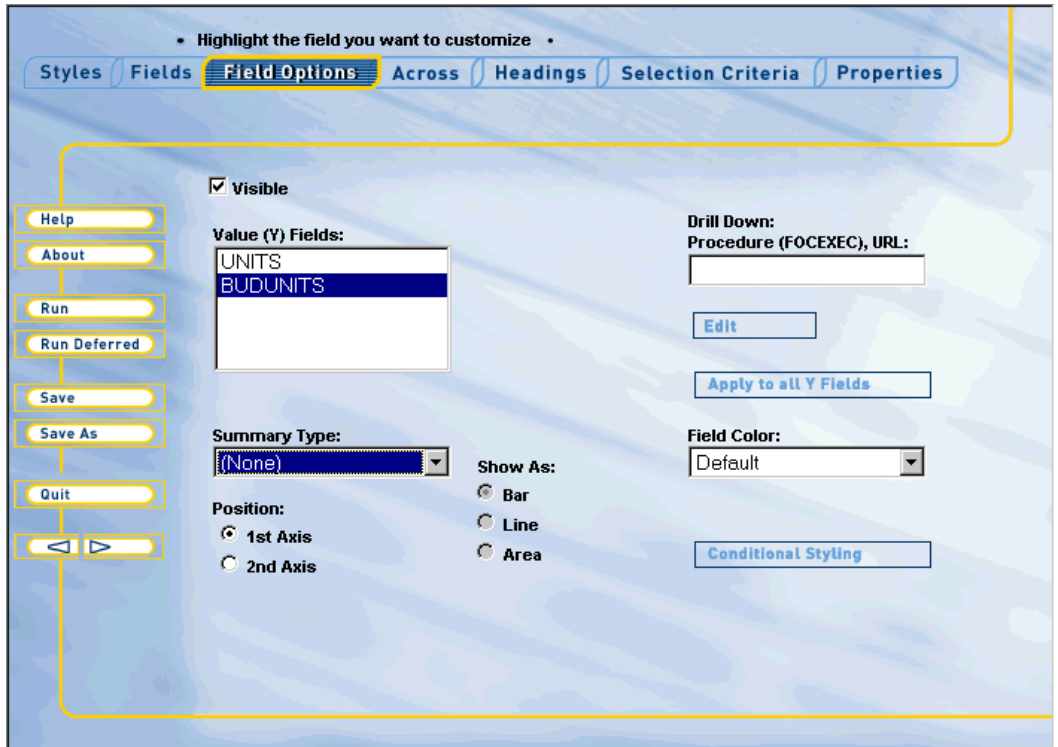
Assigning Characteristics to Y-Axis Values

You can assign a characteristic for each Y-axis field in your graph. The characteristics, or prefix operators, are defined in the following table.

Summary Type	Description
ASQ	Average Square
AVE	Average
CNT	Count
FST	Show first in group
LST	Show last in group
MAX	Maximum
MIN	Minimum
PCT	Percentage
PCT.CNT	Count Percentage
RPCT	Row Percentage
TOT	Heading Total

Procedure **How to Assign Characteristic to Y-Axis Values**

1. From the Fields tab, select the Sum radio button under Y-axis values.

2. Click the *Field Options* tab.

3. From the Value (Y) Fields list, select the field you would like to assign a characteristic (or prefix operator) to.

4. Select the characteristic from the Summary Type drop-down list.

The field name in the Value (Y) Fields list is updated with the appropriate prefix. For example, if you have a field named SEQ_NO and select the Average Square summary type, the field name changes to ASQ.SEQ_NO.

Creating Multiple Graphs

You can create multiple graphs by selecting a second horizontal category (X-axis).

The number of graphs created depends on the number of values in the field you select. For example, if you select a field with two values, two graphs are generated. If you select a field with ten values, ten graphs are generated.

You can select the second horizontal category from the Across tab in the Graph Assistant.

Multiple graphs can be displayed in either merged format or in columns. For details, see *Merging Multiple Graphs* on page 6-13 and *Displaying Multiple Graphs in Columns* on page 6-14.
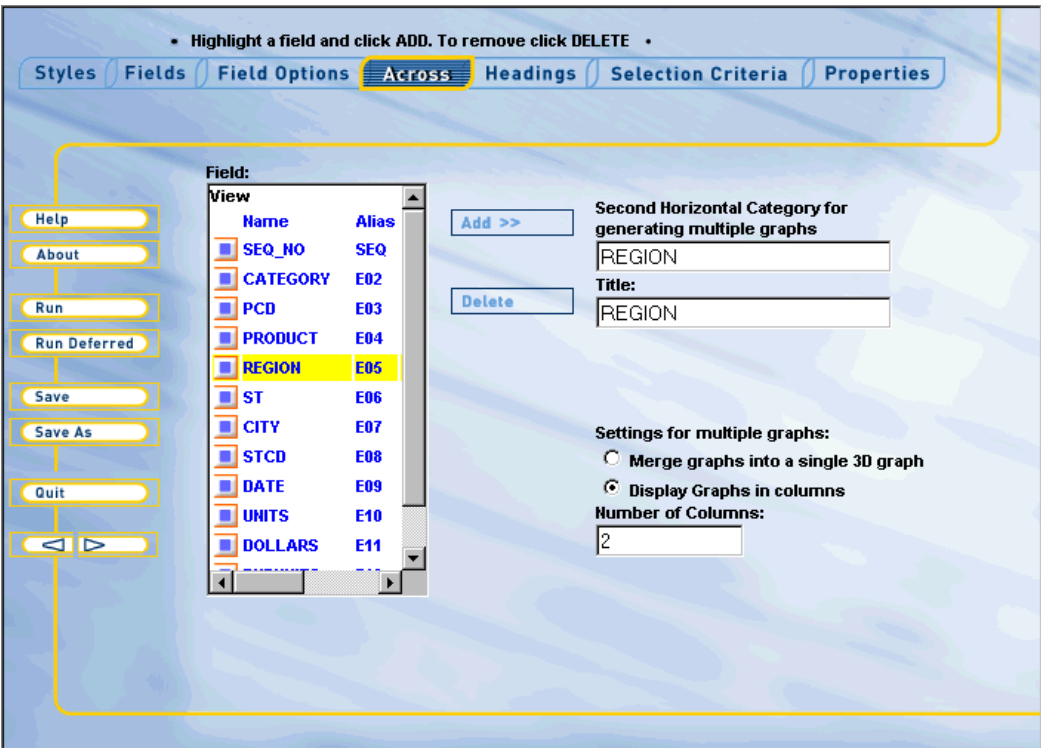
Procedure **How to Create Multiple Graphs**

1. Click the Across tab of the Graph Assistant.

2. Select a field from the Fields list window and click *Add*. You may change the title or accept the field name as the title.

Merging Multiple Graphs

When you create a graph with a second horizontal category, multiple graphs are generated. You can merge these graphs into a single graph.

You can do this from the Across tab in the Graph Assistant.

Procedure **How to Merge Multiple Graphs**

1. Click the Across tab of the Graph Assistant.

2. Add a field to the Second Horizontal Category box.

3. Select the *Merge graphs into a single 3D graph* radio button. When you run your graph, the display shows an X, Y, and Z axis to represent the dual X-axis and the Y-axis.

Example **Merging Multiple Graphs**

The following illustrates a graph with two horizontal, or X-axes, categories (PRODUCT_ID and PACKAGE_TYPE) that have been merged.
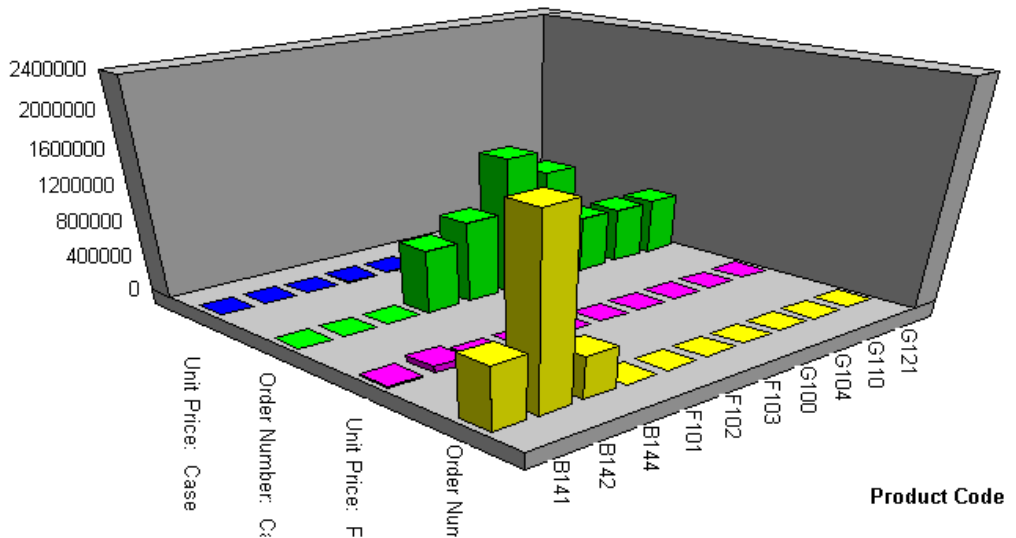
Displaying Multiple Graphs in Columns

When you create a graph with a second horizontal category, multiple graphs are generated. You can display these graphs in columns.

You can do this from the Across tab in the Graph Assistant.

Procedure **How to Display Multiple Graphs in Columns**

1. Click the *Across* tab of the Graph Assistant.

2. Add a field to the Second Horizontal Category box.

3. Select the *Display Graphs in Columns* radio button. This is the default selection.

4. Select the number of columns to display the graphs. The default value of 0 displays all of the graphs in one single column, one underneath the other. Selecting a number of 1 or greater places the graphs in an HTML table, with the number of cells across the table corresponding to the number of columns specified.

Example **Displaying Multiple Graphs in Columns**

The following illustrates a graph that has a second horizontal category. The multiple graphs that are generated appear in 2 columns since the Display graphs in columns radio button was selected when creating the graph.
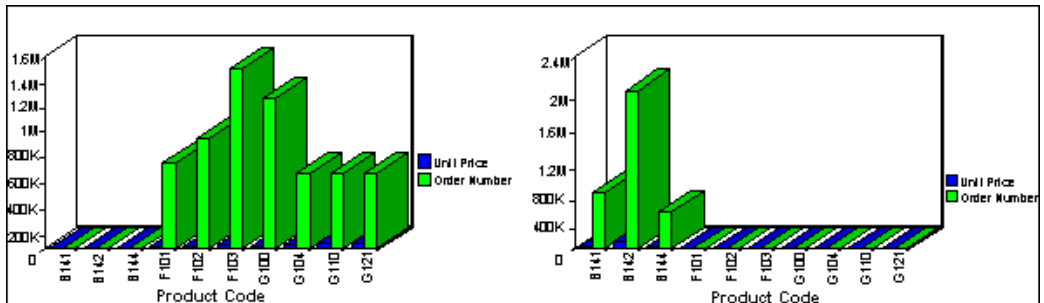
Reference   **Graph Assistant Across Tab**

Fields Window

Provides a list of all the fields in the current data source.

Second Horizontal Category for generating multiple graphs

Displays the field you have selected for the second horizontal (X-axis) category.

Title

Enter a title for the second horizontal category (X-axis) here.

Settings For Multiple Graphs

Select one of the following radio buttons when creating multiple graphs:

Merge Graphs into a single 3D graph

When this radio button is selected, the multiple graphs generated by the second horizontal category will be merged into a single graph.

Display Graphs in Columns

To display multiple graphs in columns, click this radio button and enter the number of columns you wish in the *Number of Columns* box.

Refining the Data Set For Your Graph

After selecting field values for the X and Y axes, you may wish to limit the data that displays in your graph. You can do this by creating WHERE statements. A WHERE statement limits data by creating parameters the data must satisfy before it is included in the data set.

For details on creating WHERE statements, see Chapter 5, *Creating a Report With Report Assistant*.
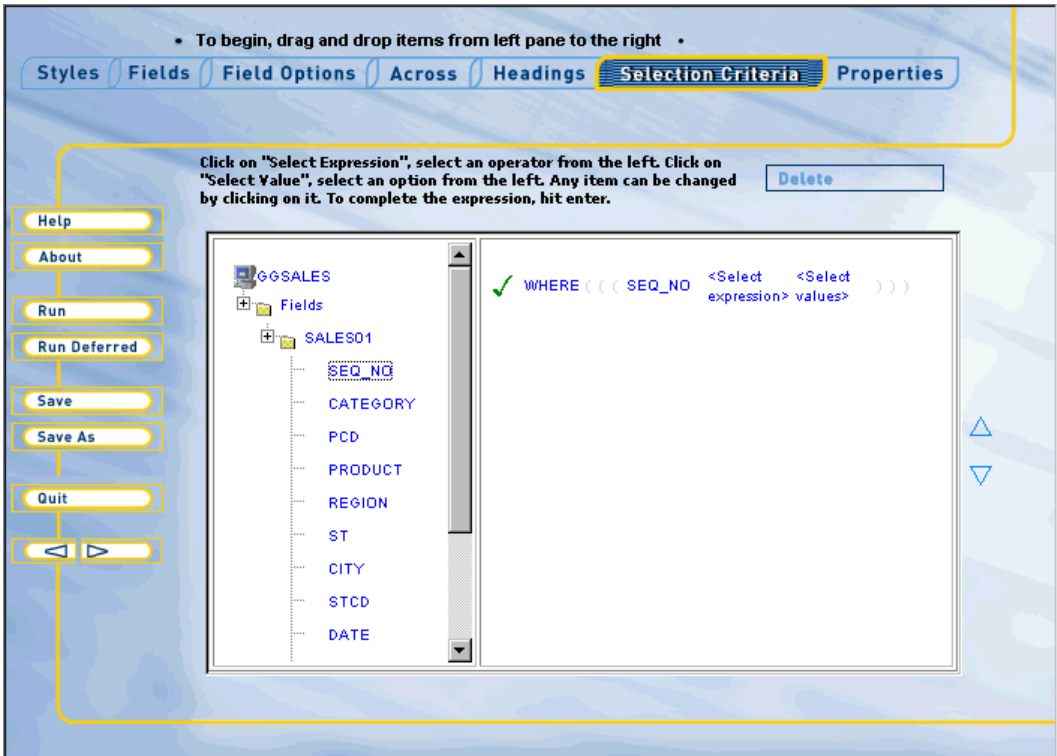
Displaying Missing Data Values in a Graph

You can display missing data values (in a bar graph, line graph, area graph, or any variation of these graph types) in one of the following formats:

- **Graph as zero.** In bar graphs, a bar displays on the zero line. In line graphs, a solid line connects the missing value with the succeeding value. In area graphs, the area displays on the zero line.

- **Graph as gap.** In all graph types (bar, line, or area), missing values display as a gap in the graph.

- **Dotted line to zero.** In line graphs, a dotted line connects the missing value with the succeeding value. In 3D bar graphs, solid lines outline the flat bar corresponding to the missing value. In 2D bar graphs, a gap displays in the graph. In area graphs a transparent area displays down to the zero line and then up to the succeeding value.

- **Interpolated dotted line.** In a line graph, missing values display as an interpolated dotted line that connects the plot points immediately preceding and succeeding the missing value. In bar and area graphs, missing values display as an interpolated (transparent) bar or area.

Procedure **How to Display Missing Values in a Graph**

1. In the Graph Assistant, click the Properties tab.

2. Click Y-axis.

3. From the Missing Values Display drop-down list select one of the following values:

    - Graph as zero.

    - Graph as gap.

    - Dotted line to zero.

    - Interpolated dotted line.

For details on missing value options, see *Displaying Missing Data Values in a Graph* on page 6-17.

Example **Displaying Missing Values as Zero In a Graph**

The following illustrates how missing values display in a bar graph when designated to display as zero. The CURR_SAL value for Seay is missing, as well as the RAISE value for Bryant and Huntley.
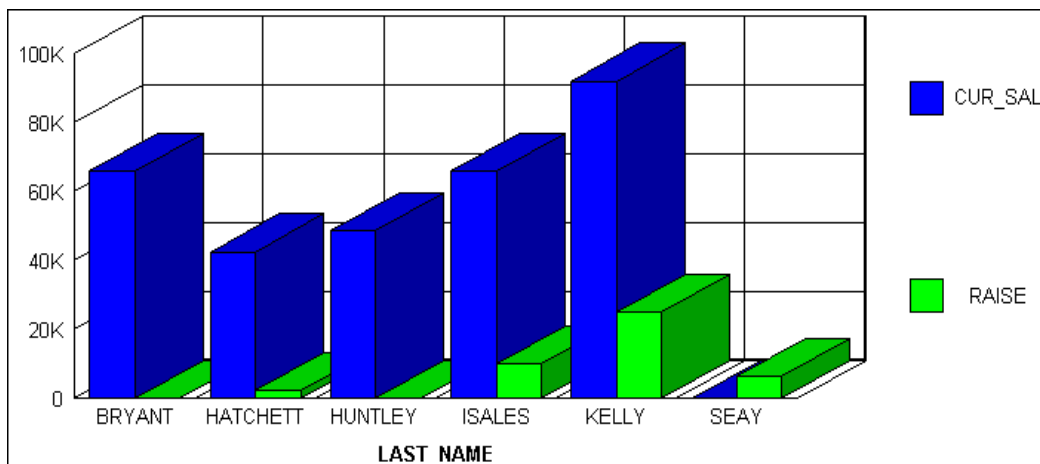
Example **Displaying Missing Values as a Gap**

The following illustrates how missing values display in a bar graph when designated to display as a gap. The CURR_SAL value for Seay is missing, as well as the RAISE value for Bryant and Huntley.
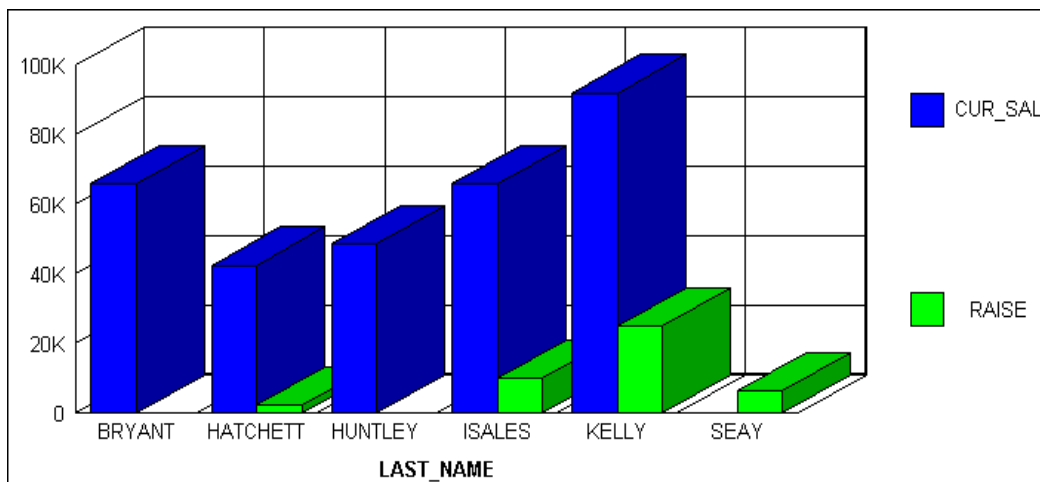
Example   **Displaying Missing Values as a Dotted Line to Zero**

The following illustrates how missing values display in a line graph when designated to display as a dotted line to zero. The CURR_SAL value for Seay is missing, as well as the RAISE value for Bryant and Huntley.
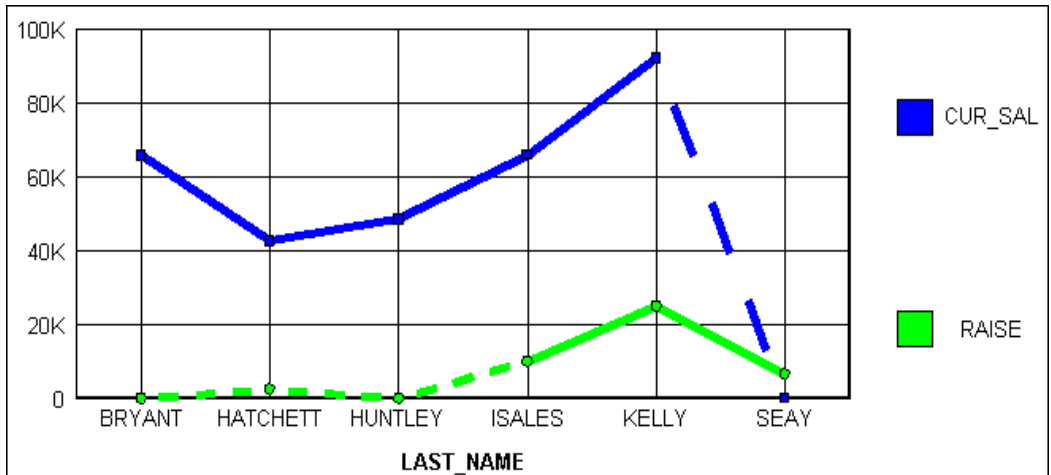
Example   **Displaying Missing Values as an Interpolated Dotted Line**

The following illustrates how missing values display in a line graph when designated to display as an interpolated dotted line. The CURR_SAL value for Seay is missing, as well as the RAISE value for Bryant and Huntley.
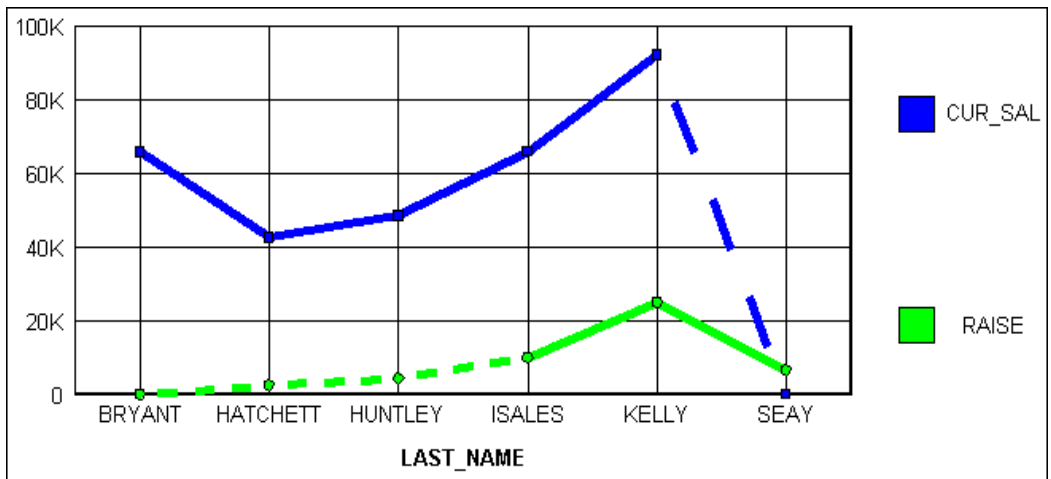
Linking Graphs to Other Resources

To drill down to a more detailed level of information in a graph, you can link a procedure (FOCEXEC) or a URL to one or more values in your graph. When you run your graph the selected values become "hot spots" that invoke the underlying procedure or URL.

Procedure **How to Link a Graph to Other Resources**

1. Click the *Field Options* tab in the Graph Assistant.

2. Select the value from the Value (Y) Fields list.

3. Click the *Edit* button in the Drill Down field. The Drill Down dialog box opens.

4. Select either *Execute New Procedure (FOCEXEC)* or *Execute URL* radio button.

   You can select the *No action* radio button to disable a drill-down link.

5. If you are linking your graph to a:

   • URL, type the URL in the URL text box. If you don't want the URL to display when a user mouses over a link in the graph, you can enter an alternate comment in the Alternate Comment for Hyperlink text box.

   • Procedure, select the procedure from the hierarchy.

6. Use the *Add* button to add any parameters. For details, see *Creating Parameters* on page 6-21.

7. Click *OK*.

Note: You can disable drill-down by following steps 1-3 above and then selecting the *No Action* radio button from the Drill Down dialog box.

Creating Parameters
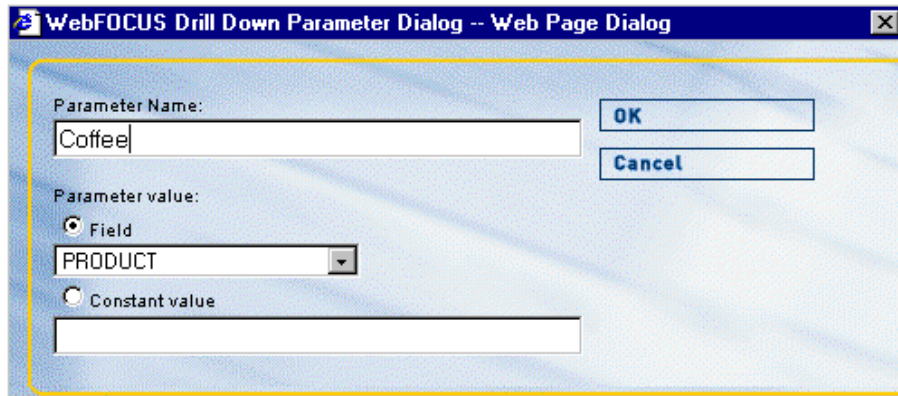
Parameters allow you to specify criteria and conditions for the linked (drill-down) report. By defining parameters, you can control the amount and type of information to retrieve when you click on a hot spot.

Procedure **How to Create a Parameter in the Main and Drill Down Procedures**

1. Select the Selection Criteria tab.

2. Create an expression (WHERE statement) that defines a parameter. For details on creating WHERE statements, see Chapter 5, *Creating a Report With Report Assistant*.

3. Select the Field Options tab.

4. Select the field that you want to drill down on, for example, Product.

5. Click *Edit*. The WebFOCUS Drill Down Dialog opens.

6. Click *Execute Procedure (FOCEXEC)* or *Execute URL*, for example, Coffee Sales.

7. Click *Add*. The Drill Down Parameter Dialog box opens.

8. Enter the name of the parameter you created in the drill down procedure in the Parameter Name text box, for example, Coffee.

Note: When passing parameters to a drill-down procedure, you must use local amper variables (&variables). Global amper variables (&&variables) cannot be used as drill-down parameters. Also, when entering your parameter name it is not necessary to type an ampersand (&) before the parameter name. This will create a global amper variable that cannot be used as a drill-down parameter.

9. When you pass the parameter to the drill down procedure, you must set a value for it in the Drill Down Parameter Dialog box. If you select:

- **Field.** The parameter will be set to the corresponding value of the object the user drills down on in the specified field.

- **Constant value.** The parameter is set to the specified value.

Note: If the drill-down report contains a -DEFAULTS statement that sets a default value to the same amper variable passed from the main report, the amper variable value passed down overwrites the -DEFAULTS statement in the target procedure.

10. Once a value has been supplied, click *OK* to return to the Drill Down Dialog box. The parameter is added to the With Parameters list box.

Reference **Graph Assistant Field Options Tab**

Value (Y) Fields

Lists the fields selected for the Y-axis.

Summary Type

Select a summary type for the Y-axis field selected in the Value (Y) Fields list.

Position

Select which field(s) should be displayed on a second axis. To display a particular field on a second axis, select the field from the Value (Y) Fields list and then select the *2nd Axis* radio button.

Show As

Specify the style (Bar, Line or Area) in which the graph represents a particular data series.

The Show As group only applies when you have selected a bar, line or area graph from the Styles tab.

Drill Down/Edit

Add drill-down capability to a graph here.

Field Color

Select the display color for the field currently selected in the Value (Y) Fields list.

Conditional Styling...

Apply conditional styling to a graph here.

Visible

When deselected, allows you to temporarily hide the display of a Y-axis field.

Apply to All Y Fields

Applies the same drill down procedure to all value (Y) fields.

Adding Labels to a Graph

Adding labels to your graph helps provide important information about what the data in your graph represents. You may choose to add headings and/or footings to your graph, as well as horizontal (X) and vertical (Y) axis labels.

From the Headings tab of the Graph Assistant, you can add titles, headings, and footings and customize them. For details on customizing see, *Customizing Fonts in a Graph* on page 6-29.

Note that there is a 95 character limit for Graph Titles.

Note: If your graph labels or legends are not displaying correctly when you run your graph, see *How to Change Color Settings* on page 6-47 for details on correcting this.

Reference **Location of Headings and Footings in Graph Output**

The following illustrates where FOCUS Titles and Graph Titles appear in graph output. Note that none of the headings in this sample have been formatted and appear in their default format. Also note that the Graph Titles chart title will display in the graph output as well as in your browser's title bar.

Procedure **How to Add a Heading or Footing to Your Graph**

1. Click the *Headings* tab of the Graph Assistant.

2. Click *FOCUS Titles*.

3. Enter the text for the heading in the Page Heading box. Enter the text for the footing in the Page Footing box.

Note: If you change the font size of your heading (FOCUS titles), the code may not properly reflect the font size you specified when you open the procedure in a text editor. This does not affect functionality. You can edit the procedure manually to correct the size.

Procedure **How to Add a Field to a Graph Heading or Footing**

1. Click the *Headings* tab of the Graph Assistant.

2. Click *FOCUS Titles*.

3. Click the Fields button .

4. Drag and drop a field to where you would like it to appear in either the heading or footing. Repeat as necessary.

   Note: For more control over designing your heading, you can only drag and drop fields to the Headings tab.

5. Click the X in the upper right corner to close the fields list.

Procedure **How to Add Titles, Subtitles, and Footnotes to a Graph**

1. Click the *Headings* tab of the Graph Assistant.

2. Click *Graph Titles*.

3. Enter the text for the Chart Title, Chart Subtitle and Chart Footnote in the respective boxes.

   Note: There is a 95 character limit for Graph Titles.

Reference **Graph Assistant Headings Tab (FOCUS Titles)**

Page Heading

Enter the text for the heading in the Page Heading box.

Page Footing

Enter the text for the footing in the Page Footing box.

Centered

Center aligns the selected text. The Centered option is available for upward compatibility.

Formatting tool bar

- Cut, copy, paste.

- Select all.

- Remove formatting.

- Font styles. Select from bold, italic, and underline.

- Alignment. Select left, center, or right alignment.

- Font. Select a different font from the drop-down list.

- Font size. Select a font size from the drop-down list.

- Text color. Select the text color from the color menu.

- Background color. Select the background color from the color menu.

- Fields list. Insert a field in your heading or footing from the fields list.

Reference   **Graph Assistant Headings Tab (Graph Titles)**

Chart Title

Enter text for the chart title here. The chart title will display in the graph output as well as in your browser's title bar.

Chart Subtitle

Enter text for the chart subtitle here.

Chart Footnote

Enter text for the chart footnote here.

Font

To change the font style or size, click *Style Title*, *Style Subtitle*, or *Style Footnote* button for the respective text box (Chart Title, Chart Subtitle, Chart Footnote).

Adding Vertical (Y-axis) and Horizontal (X-axis) Labels to a Graph

Vertical (Y-axis) and horizontal (X-axis) graph labels are placed on the graph according to the display fields and sort fields specified in the request. The titles that appear on the graph are the titles that appear in the Master File for that particular field.

The vertical (Y-axis) title of the graph is determined by the display field. Note that when the number of Y-axis labels is greater than one, the labels do not display along the Y-axis. Instead, the labels display in a legend that provides the names of the fields being graphed.

The horizontal (X-axis) title of the graph is determined by the sort field.

You can change the titles for the x and y axis from the Fields tab in the Graph Assistant.

Applying Custom Styling to a Graph

Using the Graph Assistant, you may customize your graph using the sub-tabs (Options, Settings, X-axis, Y-axis, Pie) on the Properties tab. The customizations you can apply to your graph include customizing fonts, X and Y-axes orientation, output destination, graph on server, label locations for all graph types, legend location and much more.

Customizing Fonts in a Graph

You can change the font for the X and Y-axis data and labels, legend text, headings, footings, subheadings, and footnotes. From the text properties dialog box you can select the:

- **Font.** Select the font type. Note that depending on what fonts you have installed on your machine, some fonts in the text properties dialog box may not be distinguishable from other fonts. In particular, Monospaced and Dialog Input may look the same as well as Dialog and San Serif.

- **Style.** Select the text style from normal, italic, bold, underline, or shadow.

- **Size.** Select the font size.

- **Text Color.** Select the font color.

- **Background Color.** Select the text background color.

- **Text Justification.** Select left, center, or right justification.

- **Text Rotation.** Select *Vertical - Bottom to top*, *Vertical - Top to bottom*, or *Horizontal*. You can apply the rotation to the *Title* or *Data*, depending on what is selected in Set Style for.

As you make changes to the text properties, sample text displays to the right and reflects all selections. You can also wrap the text by checking the *Wrap* check box. Note that when you select the Wrap option, text only wraps to the next line if there is not enough room to display the entire text in the chart.

The text properties dialog box can be invoked from many places in the Graph Assistant. Depending on where it is invoked from, different options are available.

Procedure **How to Change X Axis Label Fonts**

1. Click the *Properties* tab of the Graph Assistant.

2. Click *X Axis*.

3. Click *Style Labels*. The X Axis Properties dialog box opens.

4. Select the font properties. You can change the fonts for the data text and for the x-axis title text by selecting either the *Data* or *Title* radio button.

5. Click *OK*.

Procedure **How to Change Y Axis Label Fonts**

1. Click the *Properties* tab of the Graph Assistant.

2. Click *Y Axis*.

3. Click *Style Labels*. The Y1 Axis Label Properties dialog box opens. If you are selecting fonts for the Y2 axis, the Y2 Axis Label Properties dialog box opens, which contains the same options.

4. Select the font properties. You can change the fonts for the data text and for the y-axis title text by selecting either the *Data* or *Title* radio button.

5. Click *OK*.

Procedure **How to Change Graph Legend Fonts**

1. Click the *Properties* tab of the Graph Assistant.

2. Click *Settings*.

3. Click *Style Legend Text*. The Legend Properties dialog box opens.

4. Select the font properties.

5. Click *OK*.

Procedure **How to Change Graph Title Fonts**

1. Click the *Headings* tab of the Graph Assistant.

2. Click *Graph Titles*.

3. Click *Style Title*, *Style Subtitle*, or *Style Footnote* for the title font you wish to change. Depending on the option you select, the Heading Properties, Subheading Properties or Footnote Properties dialog box opens.

4. Select the font properties.

5. Click *OK*.

Reference **Heading Properties Dialog Box**
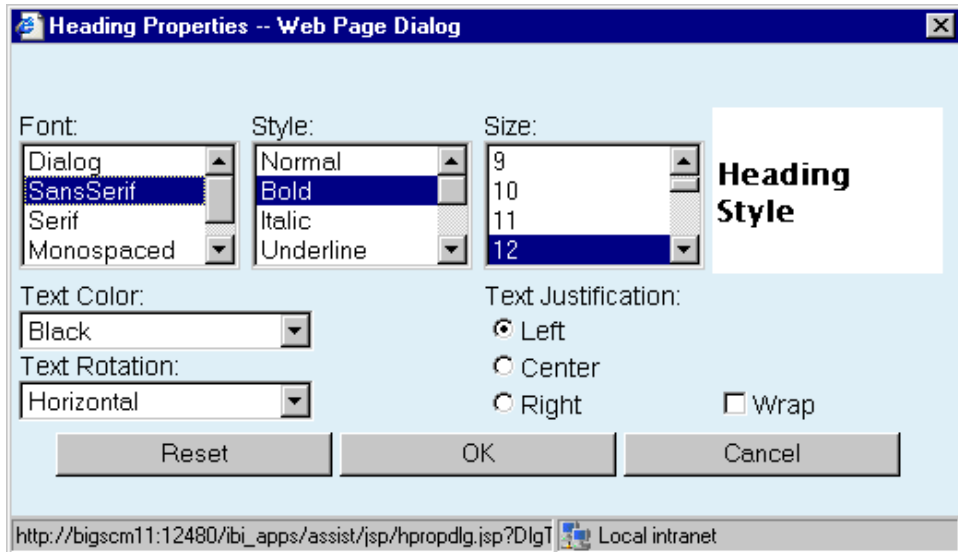
Font

Select the font type.

Style

Select the font style.

Size

Select the text size.

 Color

Select a text color from the drop-down list.

Text Rotation

- Vertical - Bottom to top. Displays text in a vertical orientation that reads from bottom to top.

- Vertical - Top to bottom. Displays text in a vertical orientation that reads from top to bottom.

- Horizontal. Displays text in a horizontal orientation that reads left to right.

Text Justification

Select if the text will be left, center, or right justified.

Wrap

Check this to wrap the text.

Reference **X Axis Label Properties Dialog Box**

This dialog box displays the options available in the X Axis Label Properties dialog box.
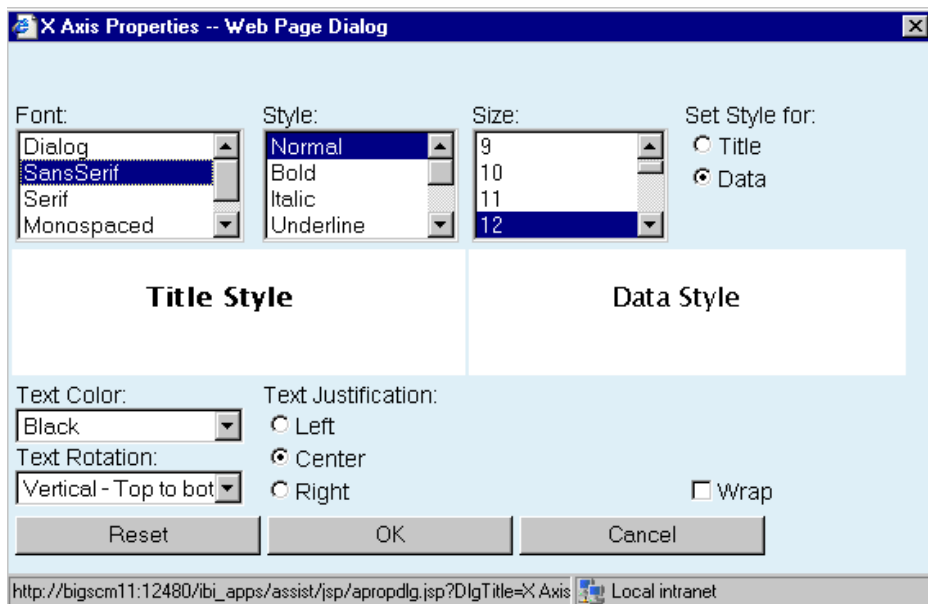
Font

Select the font type.

Style

Select the font style.

Size

Select the text size.

Text Color

Select a text color from the drop-down list.

Text Rotation

- Vertical - Bottom to top. Displays text in a vertical orientation that reads from bottom to top.
- Vertical - Top to bottom. Displays text in a vertical orientation that reads from top to bottom.
- Horizontal. Displays text in a horizontal orientation that reads left to right.

Text Justification

Select if the text will be left, center, or right justified.

Set Style For

Select to style Title or Data.

Wrap

Check this to wrap the text.

Reference **Y Axis Label Properties Dialog Box**

This dialog box displays the options available in the Y Axis Label Properties dialog box.
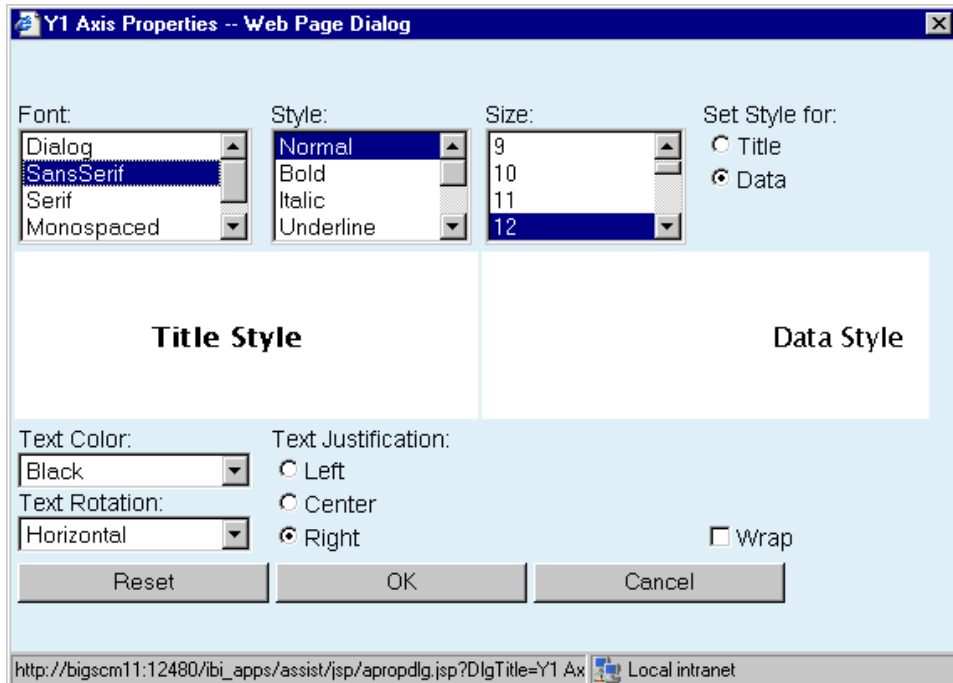
Font

Select the font type.

Style

Select the font style.

Size

Select the text size.

Text Color

Select a text color from the drop-down list.

Text Rotation

- Vertical - Bottom to top. Displays text in a vertical orientation that reads from bottom to top.

- Vertical - Top to bottom. Displays text in a vertical orientation that reads from top to bottom.

- Horizontal. Displays text in a horizontal orientation that reads left to right.

Text Justification

Select if the text will be left, center, or right justified.

Set Style For

Select to style Title or Data.

If you have selected more than one Y-axis field, the Title option will not be available in the Label Properties dialog box. The Data option will be selected by default.

Wrap

Check this to wrap the text.

Reference **Legend Properties Dialog Box**
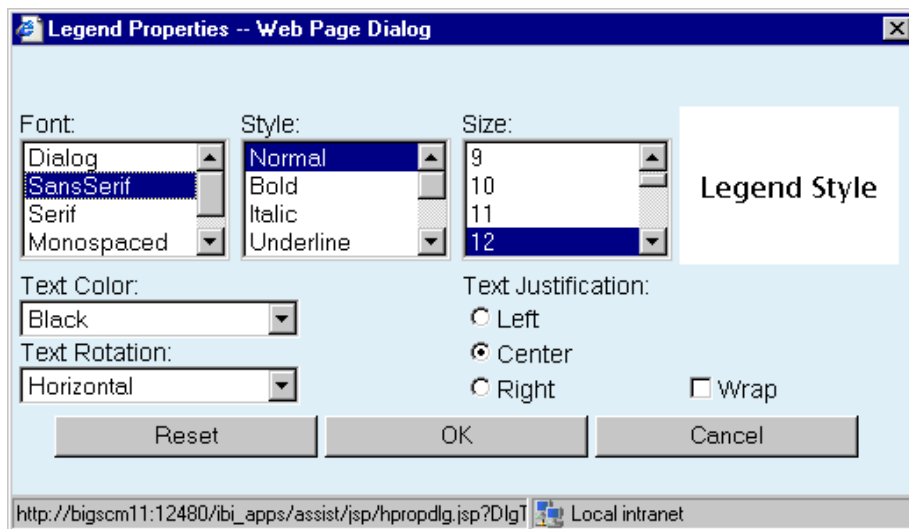
Font

Select the font type.

Style

Select the font style.

Size

Select the text size.

Text Color

Select a text color from the drop-down list.

Text Rotation

- Vertical - Bottom to top. Displays legend text in a vertical orientation that reads from bottom to top.

- Vertical - Top to bottom. Displays legend text in a vertical orientation that reads from top to bottom.

- Horizontal. Displays legend text in a horizontal orientation that reads left to right.

Text Justification

Select if the text will be left, center, or right justified.

Wrap

Check this to wrap the text.

Reference   **Graph Assistant Properties Tab (Options)**

Graph Type

Select either vertical or horizontal orientation for Bar, Line, or Area graphs. The default selection is vertical. If horizontal is selected, the X-axis will appear along the side of the graph while the Y-axis will appear along the bottom.

Graph Size

Select the WebFOCUS default size, let the applet application choose the size, or set a custom size for horizontal (width) and vertical (height), both in pixels.

Output

Select *Screen*, *File*, or *Printer* from the drop-down list. If you select:

- Screen, the output displays in the browser.

- File, enter a file name and select a file type, HTML, GIF, or JPEG.

- Printer - Sends graph output directly to your browser's default printer.

Background Color

Select a background color for the current graph.

Frame Color

Select a frame color for the current graph.

Record Limit

Record limits are used to limit the amount of data that will be displayed or used in your graph.

Read Limit

Read limits are used to limit the amount of records retrieved (or read) from the data source. The Read Limit option is not available with FOCUS data sources.

Summary Text for Graph
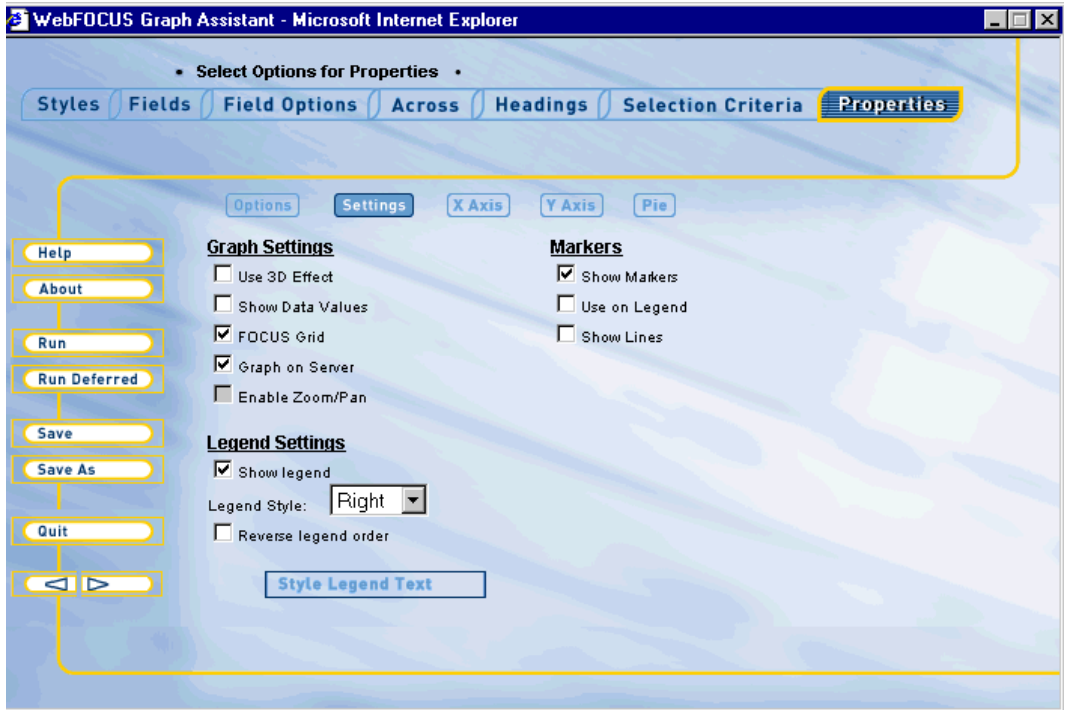
Provides a SUMMARY attribute for reports and graphs that maps to the HTML <TABLE SUMMARY> tag. A description of the graph is placed into a summary object inside the HTML table in the source code. This complies with section 508 accessibility.

The description of the graph can be no longer than 500 characters.

Reference **Graph Assistant Properties Tab (Settings)**

Graph Settings

Use 3D Effect

Applies 3D effects to your graph. This option is not supported for histograms, spectral, or radar graphs.

Show Data Values

Select if you wish data values to be displayed on your graph. If this box is unchecked, data values will not be displayed. If this box is checked, data values will be displayed.

FOCUS Grid

Grids are parallel lines drawn across a graph at the vertical and horizontal class marks on the axes. Check this box if you wish grid lines displayed. This option is only available on connected point plots, histograms, bar charts, and scatter diagrams.

Graph on Server

Runs the graph on a server (rather than your local machine) and produces the graph as an HTML file with a GIF image. Graph on Server cannot be used when the Enable Zoom & Pan box is checked.

Note: This option is only available if the server was configured for server side graphics.

Enable Zoom & Pan

Allows you to zoom on a graph. This feature is available for all graphs except radar, polar, 3D, pie, spectral, and stock graphs. Enable Zoom & Pan cannot be used when the Graph on Server box is checked.

Legend Settings

Show Legend

Check this to display the legend in your graph.

Legend Style

Select the position of the legend's text. You may select to have the legend's text on the right or left side, above or below the legend marker, or inside the legend marker.

Reverse Legend Order

Enables the display of the graph legend in reverse order. This is generally most helpful when Reverse Order of Groups is selected.

Style Legend Text

Select the font style, color, and justification.

Markers

Select how you wish markers (shapes that represent data points) displayed on your graph.

- Show Markers will show marker shapes at the data points on line graphs.

- Use on Legend will show marker shapes on the graph legend.

- Show Lines is the default in the Markers group. When this check box is deselected, marker shapes will show on a line graph, but connecting lines will not be drawn.

Reference **Graph Assistant Properties Tab (X-Axis)**

Show axis

- Top - X-axis labels appear above vertically oriented graphs and to the right of horizontally oriented graphs.

- Bottom - X-axis labels appear below vertically oriented graphs and to the left of horizontally oriented graphs. (This is the default.)

- Top and Bottom - X-axis labels appear both above and below vertically oriented graphs and to both the left and right of horizontally oriented graphs.

- Stagger Labels - When this box is checked, X-axis labels will be staggered.

- Hide first label - When this box is checked, the first X-axis label will not be displayed.

- Hide last label - When this box is checked, the last X-axis label will not be displayed.

Value Format

Allows you to select a format for the display of X-axis values. You can only change the display format if your x-axis values are numeric and the graph style is bubble, histogram (bar), or scatter. For details, see *Value Formats* on page 6-44.

Style Labels

Select and style the fonts for the X-axis.

Reverse order of groups

When checked, enables the display of the groups (X-axis) data in reverse order. When unchecked, the graph will display groups in natural order.

Major grid lines

Divide a graph at regular intervals according to the scale. Major grid lines cross their axis line at the exact location of the scale label. Styles include:

- Regular Grids - Normal grid lines that are the height of the frame.

- Grids and Ticks - Normal grid lines that extend outside the frame.

- Inner Ticks - Small tick marks from the frame edge inward.

- Outer Ticks - Small tick marks from the frame edge outward.

- Spanning Ticks - Small tick marks that span the frame edge.

Minor grid lines

Divide a graph at regular intervals according to the scale. Minor grid lines cross their axis line at equal intervals between major grids/ticks; they never align directly with a scale label. Styles include:

- Regular Grids - Normal grid lines that are the height of the frame.

- Grids and Ticks - Normal grid lines that extend outside the frame.

- Inner Ticks - Small tick marks from the frame edge inward.

- Outer Ticks - Small tick marks from the frame edge outward.

- Spanning Ticks - Small tick marks that span the frame edge.

Reference   **Graph Assistant Properties Tab (Y-Axis)**

Axis Selection List Box

If you have more than one Y-axis, select which axis you would like to apply properties to here, either Y1 Axis or Y2 Axis.

Show axis labels

- Left Side - Y-axis labels will appear on the low (bottom or left) side of the graph.

- Right Side - Y-axis labels will appear on the high (top or right) side of the graph.

- Both Sides - Y-axis labels will appear on both the low and high sides of the graph.

- Hide Maximum Value - When checked, the largest Y-axis label will not be displayed.

- Hide Minimum Value - When checked, the smallest Y-axis label will not be displayed.

- Always include Zero on Scale - Includes zero on the Y-axis scale when checked.

- If you have manually set your scale range to exclude zero, this property will be ignored.

- Log Scale - When checked, the Y-axis scale will use logarithmic scaling. When unchecked, the Y-axis scale will use linear scaling.

Reverse order of series

When checked, enables the display of the series (Y-axis) data in reverse order. When unchecked, the graph will display its series in natural order.

Descending Axis

Inverts the direction of the Y-axis so values of zero or less are displayed at the top of the graph, while values greater than zero are displayed at the bottom of the graph.

Axis Line

Enables the display of the Y-axis base line.

Zero Line

Enables the display of the Y-axis Zero line when zero is within the Y-axis range.

Value Format

Allows you to select a format for the display of Y-axis values. For details, see *Value Formats* on page 6-44.

Style Labels

Select and style the fonts for the Y-axis.

Missing Values Display

Displays missing data values (in a bar graph, line graph, area graph, or any variation of these graph types) in one of the following formats:

- Graph as zero.

- Graph as gap.

- Dotted line to zero.

- Interpolated dotted line.

Major Grid Lines

Divide a graph at regular intervals according to the scale. Major grid lines cross their axis line at the exact location of the scale label. Styles include:

- Regular Grids - Normal grid lines that are the height of the frame.

- Grids and Ticks - Normal grid lines that extend outside the frame.

- Inner Ticks - Small tick marks from the frame edge inward.

- Outer Ticks - Small tick marks from the frame edge outward.

- Spanning Ticks - Small tick marks that span the frame edge.

Minor Grid Lines

Divide a graph at regular intervals according to the scale. Minor grid lines cross their axis line at equal intervals between major grids/ticks; they never align directly with a scale label. Styles include:

- Regular Grids - Normal grid lines that are the height of the frame.

- Grids and Ticks - Normal grid lines that extend outside the frame.

- Inner Ticks - Small tick marks from the frame edge inward.

- Outer Ticks - Small tick marks from the frame edge outward.

- Spanning Ticks - Small tick marks that span the frame edge.

Reference **Graph Assistant Properties Tab (Pie)**

Show Axis Labels

When checked, enables the display of feelers and data text in a pie graph.

- Feeler Lines and Labels - Shows both feelers and data text.

- Labels Only - Shows only data text.

- Labels on Slices - Shows data text on slices.

A feeler is a line or set of lines that stretch from a pie slice label to its pie slice. Feelers are visual aids that help you know that a particular number belongs to a particular pie slice.

Slice Label

When this radio button is selected, the Y-axis label will display at the end of the feeler.

Percent Value

When this radio button is selected, the Y-axis value expressed as a percentage is displayed at the end of the feeler.

Slice Label and % Value

When this radio button is selected, the Y-axis label and its value expressed as a percentage are displayed at the end of the feeler.

True Value of Slice

When this radio button is selected, the Y-axis value is displayed at the end of the feeler.

Value Format

Allows you to select a format for the display of Y-axis series values. For details, see *Value Formats* on page 6-44.

Value Format cannot be used in combination with Slice Label.

Reference **Value Formats**

The following table gives a description of all the value formats.

List Box Display	Description
#	123 = 123
#%	123 = 12,300%
#.#%	123 = 12,300.0%
#.##%	123 = 12,300.00%
$#.##	123 = $123.00
$#	123 = $123
#K	1,234 = 1K
$#K	1,234 = $1K
#M	1,234,567 = 1M
$#M	1,234,567 = $1M

List Box Display	Description
#B	1,234,567,891 = 1B
$#B	1,234,567,891 = $1B
#T	1,234,567,891,234 = 1T
$#T	1,234,567,891,234 = $1T

Setting the Graph Height and Width

The width (or horizontal axis) of each graph, which includes any surrounding text, is automatically set to 770 pixels. When setting the graph width, you should allow for the inclusion of any text required for the vertical axis and its labels along the left margin.

The height (or vertical axis) of your graph is automatically set to 405 pixels.

The vertical axis is automatically set to cover the total range of plotted values. The height of the axis is set as high as possible (taking into consideration the presence of any headings or footings and the need to provide suitably rounded vertical class markers). The range is divided into intervals called "classes." The scale is normalized to provide class values rounded to the appropriate multiples and powers of 10 for the intervals plotted on the axis.

Procedure **How to Set the Graph Height and Width**

1. Click the *Properties* tab of the Graph Assistant.

2. Click *Options*.

3. In the Graph Size field, select the *Custom size* radio button.

4. Enter the horizontal (width) value and the vertical (height) value, both in pixels.

   The horizontal value can be any number between 20 and 985.

   The vertical value can be any number between 20 and 518.

Running, Saving, and Printing Your Graph

When you run your graph, you may print the output directly from the browser.

Note: If your graph labels or legends are not displaying correctly when you run your graph, see *How to Change Color Settings* on page 6-47 for details on correcting this.

Procedure **How to Save Your Graph From the Graph Assistant**

1. Click *Save* or *Save As* from the Graph Assistant.

2. From the Save New Standard Report dialog box, enter a name for the graph.

Note: If you are editing an existing graph, clicking Save will automatically save the edits to the current graph file. You will not be prompted to name the file again.

Procedure **How to Save Your Graph to a File**

Note: You must create a FileDef before you save a graph to a file. This is where the file will be saved to. For details, see the *Developing Reporting Applications* manual.

1. Click the Properties tab of the Graph Assistant.

2. Click *Options*.

3. Select *File* from the Output to drop-down list.

4. Name your file in the text box provided.

5. Select either *HTML*, *GIF*, or *JPEG* from the format drop-down list. The default is HTML.

6. Click *Run*. The output file is saved in the directory specified in the FileDef if the IBIJAVAPATH has been set as a system environmental variable. Otherwise, the output displays in the browser in the specified format. From the browser you can save the graph on your local system.

Note: You may open your output file by selecting *Open* from the File menu in your browser.

When saving a graph as a GIF file, if the graph contains a second horizontal category (that is an ACROSS field that produces multiple graphs), the value in the HEADING will not be saved as part of the GIF file. Instead, the ACROSS field name will be embedded in the graph's page heading to identify the graph.

Procedure **How to Run Your Graph**

After creating your graph in the Graph Assistant, click *Run* from any tab in the Graph Assistant to view your graph output.

Procedure **How to Print Your Graph**

1. Run your graph.

2. From the browser, select *Print* from the File menu.

Syntax **How to Send Graph Output Directly to a Printer**

1. From the Properties tab, click *Options*.

2. Select *Printer* from the Output drop-down list.

   You do not need to provide a name or select a format.

3. Click *Run*. The graph prints to your default printer setting.

Procedure **How to Change Color Settings**

1. From the Windows Control Panel, select *Display*.

2. Click the *Settings* tab.

3. In the Color palette box, click the drop-down arrow and select:

    •   65536 or a higher color count for Windows NT.

    •   High Color or True Color for Windows 95.

4. Click *OK*.

If you use different color settings from this recommended value, your graphs may display in grayscale format.

Using OLAP Analysis

Topics:

- Benefits of Using OLAP
- OLAP Selections Panel
- AutoSort
- Drill Down On Measures

WebFOCUS Online Analytical Processing (OLAP) enables you to view and quickly interact with data in order to make critical business decisions. You can drill down or roll up data hierarchies, pivot fields from columns to rows (or vice versa), and slice-and-dice information by filtering or querying data sources based on specified criteria or thresholds. OLAP tools are specifically designed for highly iterative, multidimensional viewing of data and therefore are not confined to the limitations of two-dimensional reports.

The OLAP selections panel (interface), AutoSort, and Drill Down on Measures allow you to produce faster results when slicing and dicing data:

OLAP selections panel. Provides the ability to select or multi-select values from one or more fields (dimensions), through the use of drop-down lists (controls). You also can customize basic measures in the actual report rather than with the use of the WebFOCUS OLAP Control Panel (OCP). Report Assistant includes an Enable OLAP drop-down list, located directly under the Automatic Drill Down drop-down list, allowing you to turn on this feature.

AutoSort (or automatic BY TOTAL). Provides single-click automatic measure-based sorting by allowing you to click the diamond button to the left of the column title associated with a measure.

Drill Down on Measures. Provides the ability to drill down to the last dimension element under a dimension field in a dimension hierarchy by clicking any measure value in the report. The values displayed for all the measures present in the report will depend on the values of the resulting BY fields (if any) .

Benefits of Using OLAP

The OLAP model organizes data by predefining hierarchical dimensions, which are groups or lists of related fields. For example, a typical hierarchy of sales regions could be defined as the GEOGRAPHY dimension and could include the fields (in descending order) Region, State, and City. Region, the highest level in this hierarchy, would contain a list of all available regions within GEOGRAPHY. State, the second highest level in the hierarchy, would contain a list of all available states within those regions, and so on. Similarly, the elements Product Category and Product Name can be grouped in a dimension called PRODUCT.

The combination, or matrix, of two or more dimension hierarchies in an OLAP-enabled data source is called *multidimensional*. For example, the GEOGRAPHY and the PRODUCT dimensions can be combined in a matrix so that the intersections of their criteria provide specific values—for example, sales of coffee in the Northeast region.

Data are facts stored in a data source. Facts by themselves, however, are often meaningless. For example, a revenue report for the products that sold during 1997 in the Eastern region provides the following facts:

- Types of products that sold.

- Revenue for each product sold.

- Time period during which the products sold (2002).

- Region where the products sold (Eastern).

These facts do not provide much meaning because they are only compared to each other and not to any other pertinent data. The report might show that your company sold $13,258,712 worth of bookshelves during 2002, which may appear to be a large amount. However, unless you know how many units were expected to sell during 2002 in the Eastern region or how many units sold in other regions during that same time, the fact that your revenue from selling bookshelves was $13,258,712 is of little value.

To gain insight, you might wish to compare this set of data against a similar set for the previous year. This comparison would reveal which products had higher (or lower) sales than last year and by what amount (or percentage). However, this information is at a summary level and does not provide details such as the exact location (county, city, or branch) and the exact time period (quarter, month, or day) that product sales were better or worse. To ask these kinds of specific questions and to perform the top level to base level analysis necessary to find the answers requires an OLAP tool such as the OLAP Control Panel.

Working with the identical report in the OLAP Control Panel, you can quickly and easily select the region (Eastern), then drill down to the branch or sales representative level to discover the specific location where product sales differed from your expectation. Then you can click the time period field (in this case, 2002) and drill down to view quarterly or monthly detail. At this point, you can determine which products sold more or less than expected at the exact time *and* location. Your understanding of your particular business can then help you to determine why this trend or event occurred, enabling you to take action to curb a risk or exploit an opportunity in the future.

You also can drill down to the next lower level in a defined dimension hierarchy with one mouse click directly from an OLAP-enabled report (while the OLAP Control Panel is closed). When you use this feature, called AutoDrill, the report transforms immediately.

Additionally, you can perform slice-and-dice operations (including multiple selection) with a few mouse clicks directly from your report (while the OLAP Control Panel is open). With this feature, called Autoselection, each time you click a hot field (hyperlink), the field value displays in a selection list that limits the scope of your report.

OLAP analysis expands your view of the data and clarifies relationships that may not be immediately obvious when you are designing a report. To further enhance your view of the data, you can invoke a graphical representation directly from the OLAP Control Panel by invoking the Graph Panel.

From the Graph Panel you can select the measures to graph and choose from several different graph styles. You can display multiple graphs as well as display more than one style within a graph. Your report and graph(s) display simultaneously.

As with many things in the real world, you cannot view an object in two dimensions to understand its meaning. To gain an understanding, you must view the object dynamically from multiple perspectives and at various levels of depth, as well as compare it to similar items.

You can examine any data using OLAP, as long as the Master File has been set up properly. For more information, see *WebFOCUS Managed Reporting Development and Administration Web Browser Edition*.

Reference   **OLAP Terminology**

Cube	Combination, or matrix, of two or more dimensions. The Sales02 table could include the Time, Product, and Location dimensions so that a user can view the Revenue measure for Croissants sold in Ohio during the First Quarter.
Dimension	Group or list of related elements, usually structured in a hierarchy. For example, a Location dimension could include the elements Country, Region, State, and City arranged in a hierarchy where Country is the top level and City is the base level. Dimensional data usually describes the item that is measured.
Drill down/Roll up	Manipulating a report by viewing other levels of a dimension's hierarchy. Rolling up to summary data is also called drilling up. Drill down and drill up expand or limit your view of the data by displaying more or less detail about the item(s) being measured.
Element	Item within a dimension (also field or member). For example, year, quarter, and month are elements of the Time dimension.
Hierarchy	Logical parent-child structure of elements within a dimension.
Measure	Type of item that specifies the *quantity* of another element with which it is associated. A measure typically defines how much or how many. For example, Units, Revenue, and Gross Margin are measures in the Account dimension and specify how many units were sold, how much revenue was generated, and at what profit margin, respectively.
Multidimensional	Term used to describe an OLAP-enabled data source. Derived from the OLAP model, which combines two or more dimensions to create a matrix, commonly known as a cube, in which the intersections of the criteria for the dimensions provide specific values.
Pivot	Manipulating (or rotating) the view of a report by moving a field (or a group of fields) from a column to a row, or vice versa.
Slice-and-dice	Process of applying selection criteria to multidimensional data sources based on specified criteria and thresholds to derive limited data subsets for reporting and analysis.

Variable	Type of element within a dimension that specifies the *quality* of another element with which it is associated. Typically, a variable defines who, what, where, or when. For example, Bob, Carol, and Alice are variables in the Sales Rep dimension. Pure Blend, Croissant, and Licorice are variables in the Product dimension. North America, Ohio, and Cleveland are variables in the Location dimension.

OLAP Selections Panel

The OLAP selections panel feature reduces the need for using the OLAP Control Panel by allowing you to include selection criteria in your reports with just a few clicks. You can customize the report by printing, not printing, or applying a data visualization or graph to a measure using the Measures and Graph controls. These controls are located in the top left corner of the page (if the controls are displayed at the top of the report), or towards the bottom left corner of the page (if the controls are displayed at the bottom of the report).

User Interface

When the OLAP selections panel feature is turned on, there is one control (drop-down list) for every dimension in the dimension hierarchy. You can multi-select values from any of the dimension controls to further simplify your report output. Each control has a relational operator button located on the left that allows you to change the relational operator before or after making your selection from the drop-down list. The name (not the alias or the title) of the dimensional field as it appears in the Master File is displayed at the top of each control.

There are also Measures and Graph controls. Each control contains a down arrow to the left that, when clicked, opens the corresponding pane. These controls allow you to make basic customizations on the measures present in your report and are located to the left of the first dimension control.

There is no separate frame to hold the OLAP button. Instead, there is a blue colored band containing an OLAP button (equivalent in functionality to the traditional OLAP button), a Run button, and a Reset button displayed directly above the report output (assuming the user has chosen to display the OLAP pane at the top of the report. Otherwise, the buttons will be below the report. All the controls display above these set of buttons.

The OCP graphically reflects the look and feel of the report. With the OLAP selections panel, the controls float as you resize the report window. This allows you to see all the controls as you resize the window. The following images show how the controls are rearranged as the window is being resized.

If the window becomes too narrow or too small, some of the controls will not be visible.

View the position of the controls before resizing the report window:

View the position of the controls after resizing the report window:

OLAP Options

To turn on the OLAP selections panel feature, you must select TOP or BOTTOM from the Enable OLAP drop-down list in Report Assistant. The Enable OLAP option is located under the Automatic Drill Down option in the OLAP section of the Report Options tab of Report Assistant.

To enable or disable the OLAP selections panel, you can choose from the following options:

- **None.** This is the default. When this option is selected, no code is generated in the procedure. If OLAPPANE is set in the procedure before changing the setting to None in Report Assistant, the setting will be removed from the procedure upon saving changes. As a result, executing the OLAP-enabled report returns the original OLAP selections panel. Also, the report will no longer be OLAP-enabled. Any -OLAP ON command will be removed from the report. If the option is selected in Report Assistant, the Run with OLAP option will be deselected.

- **CONTROL.** Report Painter generates the -OLAP ON command in the procedure which turns on the OLAP Control Panel. In Report Assistant, the Run with OLAP property is set.

- **TOP.** When you select this option, the ON TABLE SET OLAPPANE TOP setting is written to the procedure. This turns on the OLAP selections panel feature. The Measures, Graph, and Dimension controls, as well as the blue colored band containing the OLAP, Run, and Reset buttons display above the report output. In addition, in Report Assistant, the Run with OLAP property is set.

- **BOTTOM.** When you select this option, the ON TABLE SET OLAPPANE BOTTOM setting is written to the procedure. This turns on the OLAP selections panel feature. The Measures, Graph, and Dimension controls, as well as the blue colored band containing the OLAP, Run, and Reset buttons display below the report output. In addition, in Report Assistant, the Run with OLAP property is set.

- **HIDDEN.** You can turn the OLAP selections panel on but keep it hidden in an OLAP-enabled report. When you select this option, the ON TABLE SET OLAPPANE HIDDEN setting is written to the procedure. Later, if you want to view the OLAP selections panel, you can right-click any dimension or measure and select Show Panel. You can also return to the Report Options tab in Report Assistant and select TOP or BOTTOM from the Enable OLAP drop-down list to turn on the selections panel.

Blue Colored Band Containing OLAP, Run, and Reset Buttons

The buttons in the blue colored band and their functions are described below:

- **OLAP.** Opens the OCP. Its functionality is equivalent to that of the traditional OLAP button.

- **Run.** Executes the report. Its functionality is equivalent to that of the Run button available in the OCP.

- **Reset.** Resets all the controls in the report to their original state (that is, before the last changes or selections were made after the last execution of the report).

Measures and Graph Controls

The Measures and Graph controls are always located to the left of the first Dimension control. Both controls have a drop-down arrow on the left. Clicking the down arrow to the left of the Measures control opens a pane containing all the measures in the current report. There is a check box to the left of each measure showing the current display of the measure. These check boxes work the same way as those in the Measures Properties box in the OCP.

A check is present in the check box corresponding to every printed measure. If a measure is not printed, the check box is empty. If data visualization has been applied to a measure, the check box contains a graph icon indicating that bars will be graphed to the right of the data values for that particular measure if the report contains no ACROSS fields or right above the data values if the report contains at least one ACROSS field.

Thus, if there is a check in the check box next to a numeric measure, you can click it once to apply data visualization, click it a second time to make the measure not display (the check box will be empty), and click it a third time to put back the check to indicate the measure will be displayed. Since data visualization only applies to numeric measures, if there is a check next to a non-numeric measure, clicking the check box once removes the check, leaving the check box empty and clicking the check box a second time puts back the check.

Example   ### Using the Measures Control

This example shows a measure that is not displayed (CANADA_DOLLAR) and data visualization applied to a measure (BALANCE). OLAPPANE=TOP is applied.

```
-OLAP ON
TABLE FILE SHORT
SUM BALANCE CANADA_DOLLARS
BY CONTINENT
BY RISK_CLASS
ON TABLE SET OLAPPANE TOP
ON TABLE SET ONLINE-FMT HTML
END
```

Running the procedure above produces the report output below:

	Measures ▼	Graph		CONTINENT		REGION	
	☑ BALANCE		≡	--All-- ▼	≡	--All-- ▼	
	☐ CANADA_DOLLAR			RISK_CLASS		RISK_FACTOR	
	COUNTRY		≡	--All-- ▼	≡	--All-- ▼	
≡	--All-- ▼						

OLAP	Run	Reset

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■ Continent	■ RISK_CLASS	⬍ Balance	⬍ CANADA_DOLLAR
AMERICAS	Low	186,124,457	260,574,240
	Medium	279,928,961	391,900,545
	Unknown	29,419,313	41,187,038
ASIA	Medium	247,320,613	346,248,858
EUROPE	High	43,392,157	60,749,020
	Low	19,072,255	26,701,157
	Medium	257,181,729	360,054,421

In the window above, the Measures control is open to show how this sample report is customized. The blank check box next to CANADA_DOLLAR indicates that the CANADA_DOLLAR measure will not be printed. The small graph icon inside the check box next to BALANCE indicates that data visualization will be applied to the BALANCE measure.

Clicking Run generates the report output below:

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■ Continent	■ RISK_CLASS	Balance	
AMERICAS	Low	186,124,457	
	Medium	279,928,961	
	Unknown	29,419,313	
ASIA	Medium	247,320,613	
EUROPE	High	43,392,157	
	Low	19,072,255	
	Medium	257,181,729	

Graph Control

Clicking the down arrow to the left of the Graph control opens a pane that contains all the numeric measures in the current report. There is a check box to the left of each measure and a graph button to the right of each measure. All check boxes are unchecked by default and all graph buttons are grayed (inactive) by default. When you check a check box associated with a measure, the graph button to the right of the measure becomes active. The following are different options for graphing a measure:

- Vertical Bar

- Vertical Line

- Vertical Area

- Horizontal Bar

- Horizontal Line

- Horizontal Area

- Pie

The default is Vertical Bar. If there are multiple measures in the Graph pane and you choose to graph each one of them by putting a check in their associated check boxes, all the graph buttons to the right of the measures display a vertical bar. Clicking a graph button once changes the graph icon to Vertical Line, clicking it a second time changes it to Vertical Area, and so on until clicking it a seventh time changes all graph icons back to Vertical Bar. If there are no numeric measures or if there are no sort fields (BY or ACROSS) in the report, the Graph control is grayed (inactive). Otherwise, it is active.

Example   **Using the Graph Control**

This example shows how to graph measures using the Graph control, with OLAPPANE=TOP.

```
-OLAP ON
TABLE FILE SHORT
SUM BALANCE CANADA_DOLLARS
BY CONTINENT
ON TABLE SET OLAPPANE TOP
ON TABLE SET ONLINE-FMT HTML
END
```

Running the procedure above produces the report output below:

In the above window, the Graph control is open to show how this sample report is customized.

The BALANCE measure will be graphed as a vertical bar. The CANADA_DOLLAR measure will be graphed as a vertical area. Clicking Run generates the report output below:

The Measures and Graph controls allow you to apply data visualization or graphs to a measure, as well as to PRINT or NOPRINT the measure. Changes made in the Measures or Graph pane only take effect after you click Run.

Dimension Controls

There is a control for each dimension element in the dimension hierarchy. You can create selection criteria in your reports by clicking the down arrow on a particular dimension control and selecting a value from the list. When you click Run, the resulting report output reflects the selection made. When you click the down arrow again, the value that you selected is highlighted. You can also select multiple values by clicking the down arrow associated with a Dimension control and performing one of the following:

- Clicking a value and moving the mouse pointer up or down (depending on the values you would like to select) before releasing the mouse.

- Clicking the desired values while holding the Ctrl key on the keyboard.

As you make selections or changes in either the Measures, Graph, or the Dimension controls, the changes are reflected in the OCP. Thus, once selections or changes have been made in these controls, clicking Run anywhere in the OCP generates the same results as clicking Run that displays in the report page.

Changes made in the OCP in the Selection Criteria pane, the Measures and Graph panes, or the Measures Properties box are not reflected in the Measures, Graph, and Dimension controls. Once the report is transformed, however, after making changes in the OCP in any of these areas, the controls available in the report reflect the current state of the report.

Example **Creating Selection Criteria**

This example shows how to create selection criteria by selecting values from two of the dimension controls (CONTINENT and REGION), with OLAPPANE=TOP.

```
-OLAP ON
TABLE FILE SHORT
SUM BALANCE CANADA_DOLLARS
BY CONTINENT
BY RISK_CLASS
ON TABLE SET OLAPPANE TOP
ON TABLE SET ONLINE-FMT HTML
END
```

Running the procedure above produces the report output below:

Continent	RISK_CLASS	Balance	CANADA_DOLLAR
AMERICAS	Low	186,124,457	260,574,240
	Medium	279,928,961	391,900,545
	Unknown	29,419,313	41,187,038
ASIA	Medium	247,320,613	346,248,858
EUROPE	High	43,392,157	60,749,020
	Low	19,072,255	26,701,157

All the dimension controls show All as the selected value. This is the default. When you click a dimension control that shows All as the current selection, all the values existing in the database for that field will be available in the drop-down list. Selecting AMERICAS from the CONTINENT control and CENTRAL AMERICA and NORTH AMERICA from the REGION control generates the report shown below:

OLAP Selections Panel Interaction With Other Features

When the OLAP selections panel feature is turned on, the frame containing the traditional OLAP button is not displayed. An OLAP button displays in the blue colored band that is part of the actual report, and selection verifications that get generated through automatic drill downs (via Autodrill or Drill Down on Measures) are not displayed. Instead, the selections are highlighted in the corresponding dimension controls.

Dragging and Dropping Dimensions and Measures

You can drag and drop dimensions and measures from one position to another position in an OLAP-enabled report. You can drag and drop dimensions to and from the following drill down and drill across positions: By to By, By to Across, Across to By, and Across to Across. You can also drag and drop dimension controls from above the blue colored band to the body of the report. You can drag and drop measures to other measure positions to affect the order in which you read the measures.

Accessing Right-Click Menus in a Report

You can right-click dimensions and measures in an OLAP-enabled report to yield several choices.

When you right-click a dimension, you have the following choices:

- Delete
- New
- Move to Across/By
- Full Screen/Show Panel
- Field Info
- Help

When you right-click measures, you have the following choices:

- Sort by Highest
- Sort by Lowest
- Graph
- New
- Remove Measure
- Remove Visualization
- Forecast
- Full Screen/Show Panel
- Field Info
- Help

AutoSort

AutoSort allows you to automatically sort report rows by column values by clicking the diamond button to the left of the column title associated with a measure within the body of a displayed report. It allows you to apply measure-based sorting to an OLAP-enabled report one measure at a time.

User Interface

AutoSort requires fewer clicks to sort a particular measure column either from High to Low or from Low to High. The AutoSort feature changes the default behavior slightly in that clicking the diamond no longer opens the OCP to the By Total Properties box. To open the By Total Properties box, you must click the name of a measure in the Measures box.

The window below shows an OLAP-enabled report with no sorted measures. This is the default.

Clicking the top portion of the diamond (or diamond-shaped) button next to a measure automatically runs the report, and returns the transformed report sorted by that measure in descending order. In other words, clicking the top portion of the diamond button next to any measure automatically sorts the measure's column data from High to Low and returns the transformed report in the browser, showing the largest data value corresponding to that measure at the top of the column, and the smallest data value at the bottom of the column. If you click the bottom portion of the diamond button next to a measure, the report automatically runs, and the measure is sorted in ascending order (from Low to High) in the returned report output. See *Sorting From High-to-Low* on page 7-21.

Before applying a sort to a measure, you can place your mouse over the top or the bottom portion of the diamond button to display information in the Status bar about what the sort order will be if you clicked it. For example, in the window below, the bottom portion of Country is selected and lowest is indicated in the Status bar:

Once a measure has been sorted, clicking any half of the diamond button inverts the sort order of that measure. Thus, if the measure is sorted from High to Low, clicking either the hollow or solid half of the diamond button automatically runs the report and the measure is sorted from Low to High in the resulting report output. Also, placing your mouse over the hollow or solid half of the diamond displays in the status bar what the next sort order would be were you to click it.

At any point, placing your mouse over the diamond button associated with a measure displays the name of the measure as it appears in the Master File in Bubble Help, as shown in the above window.

Note: AutoSorting a measure while the OCP is opened causes all current changes made in the OCP to be applied, since the report is automatically executed. However, the sort order expected after AutoSorting a measure takes precedence over any sort selected in the By Total Properties box, which has not yet been applied.

Changes in AutoSort

The AutoSort feature generates different HTML code for the image mapping. There are three possible choices as shown below:

The syntax is UseMap=Map_Name, where Map_Name is the name of the image corresponding to one of the diamond buttons above.

Example   Sorting From High-to-Low

Assuming that the Balance measure has not been sorted, clicking the top portion of the diamond button next to the measure produces the results shown below:

The data values corresponding to the Balance measure display in descending order. This is because the Balance measure has been automatically sorted from High to Low. The top portion of the diamond button next to the Balance measure displays in a darker color to indicate the current sort order of the measure. Clicking the solid or hollow part of the diamond button inverts the sort order.

Interaction With Other Features

AutoSort is not available in a report that has stacked measures, since the diamond button is not displayed under these circumstances.

Drill Down On Measures

Drill Down On Measures allows you to drill down to another level of detail by clicking a value under a measure column. This feature works in combination with the AutoDrill feature. To turn on the Drill Down On Measures feature, you must select ALL from the Automatic Drill Down drop-down list, which is located in the OLAP section in the Report Assistant (Report Options tab). You can select from the following choices:

• **None.** This is the default. No Automatic Drill Down is available in the OLAP-enabled report. When this option is selected, any Automatic Drill Down setting already in the procedure is removed.

• **DIMENSIONS.** Turns on the AutoDrill feature.

• **ALL.** Turns on Drill Down on Measures.

Note: All screen shots for this feature, including those in the Examples section, have been captured with the OLAP selections panel feature turned OFF. See *OLAP Selections Panel Interaction With Other Features* on page 7-17 to see how the OLAP selections panel feature interacts with this feature.

When the Drill Down On Measures option is turned on, the procedure is updated with the ON TABLE SET AUTODRILL ALL setting. This setting causes all sort fields, which are also dimension elements (AutoDrill in action), as well as all measures to be hyperlinks in the OLAP-enabled report. If no sort fields, which are also dimension elements, are present in the report, the values corresponding to the currently displayed measures will not be hyperlinks. In other words, you cannot drill down on measures if there is no AutoDrill enabled sort field present in the report.

Although the entire report is activated when you turn on Drill Down On Measures, the behavior when clicking a measure value differs from the behavior when clicking a sort field value. When you click a value under a dimension sort field, the behavior is the same as when you use the AutoDrill feature. An IF statement is created on the field you clicked and that field is removed, a selection verification displays to the right of the OLAP button, and the next dimension element becomes the first BY field in the resulting report. When you drill down on a measure value, the results may be different depending on the combination of sort fields present in the report, as you can see in the following examples.

Selecting BY Fields and No ACROSS Fields

If the report contains at least one BY field and no ACROSS field, drilling down on a measure creates an IF statement on the first BY field (based on the value of the BY field in the row on which the measure value is clicked). The field is removed, a selection verification displays to the right of the OLAP button, and all of the dimension elements (if any) under the BY field that was removed become the first BY fields in the resulting report. The values displayed for the new BY fields are those that satisfy the IF statement created on the field that was removed. The measure values displayed in the resulting report depend on the values of the new BY fields.

Example   **Sorting With BY Fields and No ACROSS Fields**

```
-OLAP ON
TABLE FILE SHORT
SUM BALANCE
BY CONTINENT
BY RISK_CLASS
ON TABLE SET AUTODRILL ALL
ON TABLE SET OLAPPANE TOP
END
```

The following displays the report output before drilling down on the Balance measure:

Clicking the second Balance value (279,928,961) generates the following report output:

As you can see in the OCP window above, Continent and RISK_CLASS are BY fields. All the dimension elements under Continent and RISK_CLASS have now become the first BY fields, from left to right, in the resulting report output. The Continent and RISK_CLASS fields have been removed. The IF statements IF Continent EQ 'AMERICAS' and IF RISK_CLASS EQ 'Medium' have been generated, as indicated by the selection verifications to the right of the OLAP button. The data displayed for the measures in the resulting report output satisfy the values in the current BY fields.

Selecting ACROSS Fields and No BY Fields

If the report contains at least one dimension ACROSS field, and no BY fields, drilling down on a measure creates an IF statement on each ACROSS field present in the report (based on the value of the ACROSS fields in the column on which the measure value is clicked). All ACROSS fields are removed from the report, a selection verification is displayed to the right of the OLAP button for each removed field, and all of the dimension elements under the removed ACROSS fields become the first BY fields from left to right in the resulting report output. The values displayed for the new BY fields are those that satisfy the IF statements created on the fields that were removed. The measure values displayed in the resulting report depend on the values of the new BY fields.

Using OLAP Analysis

Example   **Sorting With ACROSS Fields and No BY Fields**

```
-OLAP ON
TABLE FILE SHORT
PRINT BALANCE AND CANADA_DOLLAR
ACROSS RISK_CLASS
ACROSS CONTINENT
ON TABLE SET AUTODRILL ALL
ON TABLE SET OLAPPANE TOP
END
```

The following displays the report output before drilling down on the Balance measure:

In this example, RISK_CLASS and Continent are dimension BY fields, and you can drill down on them. Clicking the Balance value 671,290 generates the following report output:

The only dimension element under RISK_CLASS is Risk_Factor and the dimension elements under Continent are Region and Country. The resulting BY fields in the report output from left to right should be Risk_Factor, Region, and Country. The RISK_CLASS and Continent fields are removed, and the IF statements IF RISK_CLASS EQ 'Low' and IF Continent EQ 'AMERICAS' are generated, as indicated by the selection verifications to the right of the OLAP button. The data displayed for the measures in the resulting report output are those that satisfy the values in the current BY fields.

Selecting BY and ACROSS Fields Under the Same Root Dimension

If the report contains at least one BY and one ACROSS dimension field, and these fields are under the same root dimension, drilling down on a measure generates an IF statement for all BY and ACROSS dimension fields originally present in the report. The selection verification is placed to the right of the OLAP button, and only the dimension elements corresponding to the removed ACROSS fields become the new BY fields in the resulting report output.

Example   **Sorting With BY and ACROSS Fields Under the Same Root Dimension**

```
-OLAP ON
TABLE FILE SHORT
SUM BALANCE AND CANADA_DOLLAR
BY CONTINENT
ACROSS REGION
ON TABLE SET OLAPPANE TOP
ON TABLE SET AUTODRILL ALL
END
```

The following displays the report output before drilling down on the CANADA_DOLLAR measure:

As you can see in the OCP, Continent and Region are dimension sort fields. Clicking the CANADA_DOLLAR value of 56,280,934 generates the following report:

Because Continent and Region are under the same root dimension (Geographic Area) in the dimension hierarchy, only the ACROSS field (Region) is broken up to its last dimension level. Hence, the resulting BY field in the report output is Country. The Continent and Region fields are removed, and the IF statements IF Continent EQ 'AMERICAS' and IF Region EQ 'CENTRAL AMERICA' are generated, as indicated by the selection verifications to the right of the OLAP button. The data displayed for the measures in the resulting report output are those that satisfy the values in the current BY field.

Selecting BY and ACROSS Fields Under Different Root Dimensions

If the report contains at least one BY and one ACROSS dimension field and the original dimension sort fields in the report belong to different root dimensions, then the BY fields present in the report are broken down to their last dimension level first and the ACROSS fields are broken down next. All original BY dimension fields and ACROSS fields are removed, an IF statement is generated for each removed BY and ACROSS field, and their selection verification is placed to the right of the OLAP button. All the dimension elements under the BY fields removed become the first set of BY fields from left to right. The dimension elements under the ACROSS fields removed follow the first set of BY fields from left to right in the resulting report output.

Example ## Sorting With BY and ACROSS Fields Under Different Root Dimensions

```
-OLAP ON
TABLE FILE SHORT
SUM BALANCE AND CANADA_DOLLAR
BY CONTINENT
ACROSS RISK_CLASS
ON TABLE SET OLAPPANE TOP
ON TABLE SET AUTODRILL ALL
END
```

The following displays the report output before drilling down on the CANADA_DOLLAR measure:

As you can see in the OCP, Continent and RISK_CLASS are dimension sort fields. Thus, clicking the CANADA_DOLLAR value of 67,021,020 generates the following report output:

Because Continent and RISK_CLASS are under the different root dimensions (Geographic Area and Risk) in the dimension hierarchy, the BY field (Continent) is broken down to its last dimension element first. Then, the ACROSS field (RISK_CLASS) is broken down to its last dimension level next.

The resulting BY fields in the report output from left to right are Region, Country, and Risk Factor. The Continent and RISK_CLASS fields are removed, and the IF statements IF CONTINENT EQ 'EUROPE' and IF RISK_CLASS EQ 'High' are generated, as indicated by the selection verifications to the right of the OLAP button. The data displayed for the measures in the resulting report output are those that satisfy the values in the current BY fields.

Selecting BY and ACROSS Fields Already Present in a Report

If there is a dimension sort field whose dimension element is already present in a report, the Drill Down On Measures process remains the same as described in the above cases. All dimension sort fields are removed from the report, an IF statement with its selection verification is generated for the dimension element removed, and new BY fields are generated for any dimension element under the dimension sort fields that were removed, even if these elements were originally present in the report.

As in AutoDrill, if the last level of detail has been reached, meaning that the dimension sort field present in the report is the last dimension element in the dimension hierarchy, only the values under the dimension sort field are hyperlinked. Clicking a hyperlink under the dimension sort field removes the field and generates an IF statement (whose selection verification is displayed to the right of the OLAP button) on the dimension sort field removed.

Drilling Down On Measures While the OCP Is Open

When the OCP is opened, clicking a hyperlinked measure automatically generates the selection criteria in the Selection Criteria pane. The Selection Criteria pane opens automatically showing all the resulting selection criteria. This allows you to multi select values by clicking different values under any measure or dimension sort field.

In the image below, clicking the Balance value 186,124,457 in the second Balance column generates the two selection criteria shown in the OCP, but with only Low available in the RISK_CLASS drop-down list, and only AMERICAS available in the Continent drop-down list. Clicking the Balance values 247,320,613 and 257,181,729 add Medium to the RISK_CLASS drop-down list, and ASIA and EUROPE to the Continent drop-down list.

You can click Run to drill down to the last dimension element under the RISK_CLASS and Continent sort fields (since each field is under a different root dimension; otherwise, only the RISK_CLASS field would be broken down to its last dimension level). These fields are removed and the selection verification generated for them reflects the selection criteria in the Selection Criteria pane. The following shows the resulting report output:

Using the data from the example, *Sorting With BY Fields and No ACROSS Fields* on page 7-23, if you want to display the different continents that had a RISK_CLASS value of Low, click the Balance value 186,124,457 in the second Balance column, and then click the Continent values AMERICAS, ASIA, and EUROPE. The image below shows these selections, and the next image shows the resulting report output.

Limits

All ACROSS fields in the report (dimension or non-dimension) are removed from the report when autodrilling on a measure. If the fields removed are dimension fields, then the dimension elements under these sort fields become BY fields in the resulting report. A selection verification is placed to the right of the OLAP button for each removed field. Dimension fields under the dimension ACROSS fields removed become BY fields (and not ACROSS fields) in the resulting report output so as to avoid exceeding the maximum number of ACROSS values that FOCUS supports, which is 64.

Interaction With Other Features

When clicking a hyperlink under a dimension sort field while the OCP is opened, the selection criteria are automatically added in the Selection Criteria pane. This allows you to multi select values by clicking other hyperlinks under a dimension sort field. If no hyperlinks are clicked under any measure, clicking Run at this point generates the same report output as when you applied the AutoDrill functionality with the OCP opened. However, clicking a hyperlink under a measure after clicking a value under a dimension sort field overwrites the AutoDrill functionality. Instead of drilling down to the next level of detail (AutoDrill), you drill down to the last level of detail (Drill Down On Measures).

Manipulating Data in an OLAP-enabled Report

Topics:

- Characteristics of OLAP-enabled Reports

- Using the OLAP Control Panel

- Saving an OLAP-enabled Report

- Displaying Graphs in an OLAP-enabled Report

- Sorting OLAP-enabled Reports

- Sorting Report Lines by Column Values

- Applying Selection Criteria to OLAP-enabled Reports

- Using AutoDrill

- Using AutoSelection

- Applying Selection Criteria to Date Elements

- Date Format Limitations

- StyleSheet Transformation

- Visualizing Trends in OLAP-enabled Reports

- Troubleshooting OLAP-enabled Reports

The WebFOCUS OLAP Control Panel (OCP) provides you with a versatile way to gain more insight from your report by dynamically manipulating the report data. You can generate optimal reports by using features of the OLAP Control Panel.

Note: All examples in this chapter have the OLAP selections panel feature turned OFF. For more information on using the OLAP selections panel, see Chapter 7, *Using OLAP Analysis*.

Characteristics of OLAP-enabled Reports

An OLAP-enabled report has a number of features that distinguish it from other reports.

- A button displays at the bottom of your report with the label OLAP.

  Click this button to view the OLAP Control Panel (OCP). For additional information, see *Using the OLAP Control Panel* on page 8-6.

  The OLAP button appears at the bottom of a graph when the OLAP-enabled procedure includes a graph request. However, the button currently is inoperative.

- A sort field (BY or ACROSS) has a blue square adjacent to it.

  When you click the blue square, the OLAP Control Panel opens. If this field is an element of a dimension, the field is highlighted in the Dimensions box. This is useful if the column has a title different from the name of the field.

- The measures (fields that make up the body of the report) have blue diamonds adjacent to them. You can click a diamond to open the OLAP Control Panel and display the properties for the selected measure.

- If your report has any selection criteria, you see them listed at the bottom of the report if you are in WebFOCUS. Note that currently, these criteria do not display at the bottom of the report in WebFOCUS (Windows version).

  Clicking the relational operator button opens the OLAP Control Panel.

- When you place the pointer over a blue square or a blue diamond adjacent to a dimension or a measure column title respectively, Bubble Help appears. Bubble Help provides a brief pop-up message with descriptive information about the report column. This information is derived from the Master File associated with the report. For details, see *Displaying Bubble Help in OLAP-enabled Reports* on page 8-5.

Dragging and Dropping Dimensions and Measures

You can drag and drop dimensions and measures from one position to another position in an OLAP-enabled report. You can drag and drop dimensions to and from the following drill down and drill across positions: By to By, By to Across, Across to By, and Across to Across. You can drag and drop measures to other measure positions to affect the order in which you read the measures.

Note: When you use the OLAP selections panel, you can also drag and drop dimension controls from above the blue colored band to the body of the report. For more information, see Chapter 7, *Using OLAP Analysis*.

Accessing Right-Click Menus in a Report

You can right-click dimensions and measures in an OLAP-enabled report to yield several choices.

When you right-click a dimension, you have the following choices:

- Delete

- New

- Move to Across/By

- Full Screen/Show Panel

- Field Info

- Help

When you right-click a measure, you have the following choices:

- Sort by Highest

- Sort by Lowest

- Graph

- New

- Remove Measure

- Remove Visualization

- Forecast

- Full Screen/Show Panel

- Field Info

- Help

Displaying Bubble Help in OLAP-enabled Reports

You can display Bubble Help for dimensions and measures in an OLAP report. Bubble Help provides a brief pop-up message with descriptive information about the report column.

Bubble Help appears only if a field description is included in the Master File associated with the report.

Procedure **How to Display Bubble Help**

1. Run an OLAP-enabled report request. The report opens in a browser in WebFOCUS.

2. Place the mouse pointer over a blue dimension square or a blue measure diamond.

    The pointer changes to a hand icon and displays the Bubble Help message associated with the report column.

The Bubble Help message box closes after a few seconds or when you move the pointer off of the blue square or diamond.

Example **Bubble Help in an OLAP-enabled Report**

In the following OLAP-enabled report, the mouse pointer was placed over the blue square adjacent to the Manufacturing Plant column. The description of the column, Location of Manufacturing Plant (as assigned in the corresponding Master File), appears as Bubble Help.

Using the OLAP Control Panel

The OLAP Control Panel enables you to manipulate the data in an OLAP-enabled report. You can add elements to or remove elements from the report, pivot rows and columns, and apply selection criteria.

To access the OLAP Control Panel, you can click the OLAP button at the bottom of an OLAP-enabled report. The OLAP Control Panel partially overlays the report.

The OLAP Control Panel contains the following components:

- The Dimensions box contains the groups of related elements defined in your data source. The elements are usually structured in a hierarchy (for example, the Location dimension contains the Region, State, and City fields; the Region is made up of several States, and each State contains several Cities). To view the elements in a dimension, click the arrow to the left of the dimension name.

  If you open the OLAP Control Panel by clicking the square adjacent to an element (rather than clicking the OLAP button), the corresponding dimension opens, and the element is highlighted.

- The Drill Down and Drill Across boxes display the fields applied to sort the report. You can change a Drill Down field to a Drill Across field (this is called "pivoting"). You also can add and remove Drill Down and Drill Across fields. Drill Across fields are added by pivoting Drill Down fields.

- The Measures Properties box contains the body of your report (usually numeric fields). You can change the display mode of a measure by clicking the check box next to the measure. For details, see Chapter 9, *Visualizing Trends in Reports*.

Adding Data and Removing Data for an OLAP-enabled Report

You can add data to or remove data from an OLAP-enabled report in the OLAP Control Panel.

- You can add or remove elements in a dimension.

- You can add or remove measures.

Procedure **How to Add an Element to an OLAP-enabled Report**

To add an element to a report:

1. Select a report layout box (Drill Down or Drill Across).

2. Click the dimension or element in the Dimensions box at the top of the window. (You can view the elements in a dimension by clicking the arrow to the left of the dimension.)

3. Click *Run* to execute your report with the new settings.

Example   ## Adding an Element to an OLAP-enabled Report

You have an OLAP-enabled report showing sales data broken out by Store Name, Product Category, and Manufacturing Plant. You want to drill down, that is, further break down the report by Product Name.

1. Click the square next to PRODCAT in the report.

   The OLAP Control Panel opens.

   The Product dimension is open, and the Product Category field is broken down into Product Name.

2. To see your report broken out by Product Name, add it to the Drill Down field box.

3. Click *Run* to execute the report.

PAGE 1					
Store ■Name:	Manufacturing ■Plant	■PRODCAT	Product ■Name:	Line ⬍ Total	⬍ Quantity:
AV VideoTown	BOS	CD Players	QX Portable CD Player	$1,396,859.36	9,789
		Camcorders	110 VHS-C Camcorder 20 X	$3,837,017.68	12,972
			120 VHS-C Camcorder 40 X	$4,471,002.48	13,224
			150 8MM Camcorder 20 X	$1,556,171.32	5,723
			250 8MM Camcorder 40 X	$435,356.88	1,277
			650DL Digital Camcorder 150 X	$4,659,121.44	5,651

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4. The report now breaks out information for each Product.

Procedure **How to Remove an Element From an OLAP-enabled Report**

1. Select the element in the Drill Down or Drill Across box.

2. Click *Remove* .

3. Click *Run* to execute the report.

Example   **Removing an Element From an OLAP-enabled Report**

You have an OLAP-enabled report showing Lineprice and Quantity sorted by Store Name, Manufacturing Plant, Product Category, or Product Name.

To remove Product Category from the report:

1. Click *OLAP* to open the OLAP Control Panel. (You can also click the square icon next to PRODCAT. This opens the OLAP Control Panel with Product Category highlighted.)

2. Select *PRODCAT* in the Drill Down box.

3. Click *Remove*   .

4. Click *Run* to execute the report.

How to Add or Remove a Measure in an OLAP-enabled Report

1. In the Measures box, select the check box next to the name of the measure to add a measure to the report.

or

Deselect the check box next to the name of the measure to remove a measure from the report.

2. Click *Run* to execute your report.

Note: You can add non-displaying measures to the OLAP-enabled report by applying the NOPRINT option to columns while creating or designing the report. You can also associate data visualization graphs with measures to track trends. For details, see Chapter 9, *Visualizing Trends in Reports*.

Example   **Adding a Measure to an OLAP-enabled Report**

You have an OLAP-enabled report with three measures: LINEPRICE, QUANTITY, and COST, but only the LINEPRICE measure appears.

To display all three measures:

1. Select the check boxes next to the QUANTITY and COST measures.

2. Click *Run* to execute the report.

Saving an OLAP-enabled Report

You can save your report as an Excel spreadsheet file, a PDF file, or to your application.

Procedure **How to Save an OLAP-enabled Report as an Excel File**

1. Click *Options*.

2. Select *Save the data in an Excel file* or *Save the data in an Excel 2000 file*.

3. Follow the instructions to export the data.

Note: After you save to Excel 2000, only explicit drill-down works. You cannot drill down via AutoDrill. The pre-Excel 2000 format does not support drill-down of any kind.

Procedure **How to Display an OLAP-enabled Report in PDF Format**

1. Click *Options*.

2. Select *Display as a PDF Report*. A second browser opens and launches Adobe Acrobat.

Displaying Graphs in an OLAP-enabled Report

You can graph the results of an OLAP-enabled report request directly from the OLAP Control Panel. You select the specific data elements to include and view the tabular report and a graphical representation of the identical information simultaneously in a split window. The graph appears in a frame in the top half of the window. The report displays in a frame in the bottom section of the window, and the OLAP button is located in the left bottom corner of the window.

When you select Save in My Reports, both the graph(s) and the table are saved. The other options (for example, Save the data in an Excel File) do not save the graph.

There is no limit to the number of characters in a graph legend's label, but long labels may appear truncated.

Available OLAP Graph Types

You can select from the following graph types in the OLAP Control Panel:

- Vertical Bar (default style)
- Vertical Line
- Vertical Area
- Horizontal Bar
- Horizontal Line
- Horizontal Area
- Pie

When you select a Vertical or Horizontal Bar, Line, or Area controlling graph style, a measure can display in any of those styles. For example, the first measure can display as bars, the second measure as lines, and the third measure as areas. All measures must have the same orientation (vertical or horizontal). When you choose Pie as the controlling graph style, you can display only pie charts. The default graph style is Vertical Bar. Multiple graphs are stacked.

Reference **Combining Graph Styles and Measure Styles in OLAP Graphs**

The following table lists the available combination of selections:

Controlling Graph Style	Potential Measure Styles
Vertical Bar (default)	Vertical Bar (default)
	Vertical Line
	Vertical Area
Vertical Line	Vertical Line (default)
	Vertical Bar
	Vertical Area
Vertical Area	Vertical Area (default)
	Vertical Bar

Controlling Graph Style	Potential Measure Styles
	Vertical Line
Horizontal Bar	Horizontal Bar (default)
	Horizontal Line
	Horizontal Area
Horizontal Line	Horizontal Line (default)
	Horizontal Bar
	Horizontal Area
Horizontal Area	Horizontal Area (default)
	Horizontal Line
	Horizontal Area
Pie	Pie

Using the OLAP Graph Panel

You display the report and the accompanying graph(s) by selecting the Show Graph check box below the Measures Properties box and then clicking the Graph button to invoke the Graph Panel.

From the Graph Panel, you can choose the measures you wish to graph, a controlling graph style, and graph styles for the measures.

The contents of the Drill Down (BY) pane and the Drill Across (ACROSS) pane determine the X-axis fields. When there are multiple drill (X-axis) fields, multiple graphs display vertically stacked in the same frame. The measures display as Y-axis fields on the graphs you display.

Note: You cannot choose to graph alphanumeric or date fields. If there are no numeric measures, the Show Graph check box and the Graph button are disabled (grayed out).

Procedure **How to Display Graphs From the OLAP Control Panel**

1. Invoke the OLAP Control Panel and display the Measures Properties box.

    To display the panel, click the *OLAP* button at the bottom of the report.

    or

    Click the square icon adjacent to an element.

2. Select the *Show Graph* check box (located below the Measures Properties box).

3. Click *Graph* adjacent to the Show Graph check box to open the Graph Panel.

    When the Graph Panel opens, the check boxes associated with the available measures are unchecked by default.

4. Click one of the seven buttons to select a controlling graph style for your graph.

    Each of the seven icon buttons near the bottom of the Graph Panel corresponds to a controlling graph style.

    Each button has a tool tip associated with it that describes the style of the graph that results when the button is clicked.

    The first icon is the default controlling graph style (Vertical Bar).

    If you select the Show Graph check box and click Run without selecting a controlling graph style, a graph displays with the default style (Vertical Bar).

5. Select the check box(es) for the measure(s) you wish to graph.

    The graph icon corresponding to the controlling graph style also displays on the Measure Style button next to the selected measure.

6. Click *Measure Style* to change the graph style used to represent an individual measure if your controlling graph style is Line, Bar, or Area.

    If the controlling style is Pie, all measures must be displayed as pie graphs.

    When you select different styles (other than pie; for example bar and line), the graph will be of mixed type.

7. Click *Run* to display the graph(s) and the tabular report in a split screen.

8. To return to the OLAP Control Panel with all the graph settings retained, click *OK*.

9. To return to the OLAP Control Panel and to discard the graph settings, click *Cancel*.

Note:

•   If you did *not* select the Show Graph check box and you click Run, a tabular report displays *without* a graph.

•   If you did *not* select the Show Graph check box, but you did select at least one measure in the Measures & Graph Style pane, when you click OK, the system automatically selects the Show Graph check box. The tabular report displays with a graph.

Sorting OLAP-enabled Reports

To customize and enhance the display of your report, you can:

- Change the order and position of sort elements.

- Pivot rows and columns.

- Order the data in your report.

Changing the Sort Position of an Element

You can change the sort position of an element in an OLAP-enabled report using a layout box (Drill Down or Drill Across) in the OLAP Control Panel. For example, you can change from sorting by State and then by Product to sorting by Product and then by State.

Procedure **How to Change the Sort Position of an Element**

1. Open the OLAP Control Panel.

2. Select the element in the Drill Down or Drill Across box.

3. Click *Shift Up* or *Shift Down*.

4. Click *Run* to execute your report.

Example **Changing the Sort Position of an Element**

You have an OLAP-enabled report displaying QUANTITY, COST, and PRICE sorted by Store Name, Manufacturing Plant, and then by Product Name and Product Category. You want to see QUANTITY, COST, and PRICE sorted by Product Category and then by Product Name.

1. Click *OLAP* to open the OLAP Control Panel. (You also can click the square next to Store Name or Manufacturing Plant. This opens the OLAP Control Panel with either the dimension for Store Name or Manufacturing Plant open and Store Name or Manufacturing Plant highlighted.)

2. Select *PRODCAT* in the Drill Down box.

3. Click *Shift Down.*

PAGE 1						
Store ■Name:	Manufacturing ■Plant	Product ■Name:	■PRODCAT	⊜ Quantity:	Our ⊜ Cost:	⊜ Price:
AV VideoTown	BOS	110 VHS-C Camcorder 20 X	Camcorders	12,972	20,916.00	29,316.00
		120 VHS-C Camcorder 40 X	Camcorders	13,224	22,274.00	34,314.00
		150 8MM Camcorder 20 X	Camcorders	5,723	35,520.00	47,212.00
		2 Hd VCR LCD Menu	VCRs	11,182	5,934.00	8,234.00
		250 8MM Camcorder 40 X	Camcorders	1,277	5,120.00	6,384.00

OLAP

4. Click *Run* to execute the report.

PAGE 1						
Store ■Name:	Manufacturing ■Plant	■PRODCAT	Product ■Name:	Quantity:	Our Cost:	Price:
AV VideoTown	BOS	CD Players	QX Portable CD Player	9,789	6,336.00	10,816.00
		Camcorders	110 VHS-C Camcorder 20 X	12,972	20,916.00	29,316.00
			120 VHS-C Camcorder 40 X	13,224	22,274.00	34,314.00
			150 8MM Camcorder 20 X	5,723	35,520.00	47,212.00
			250 8MM Camcorder 40 X	1,277	5,120.00	6,384.00

OLAP

Pivoting Rows and Columns

You can shift (pivot) a Drill Down field to make it a Drill Across field and vice versa in an OLAP-enabled report.

Procedure **How to Pivot Rows and Columns**

1. Open the OLAP Control Panel.

2. Select the row or column you want to pivot in the Drill Down or Drill Across box.

3. Click *Pivot* .

4. Click *Run* to execute your report.

Example **Pivoting Rows Into Columns**

You have an OLAP-enabled report showing LINEPRICE by Store Name, Product Name, and Manufacturing Plant, with a row for each category, and the Lineprice appearing in a single column. You want to view the LINEPRICE data in several columns, with one column for each Manufacturing Plant. To do this, you *pivot* the Manufacturing Plant field from a Drill Down row to a Drill Across column.

1. Click *OLAP* to open the OLAP Control Panel. (You also can click the square next to Manufacturing Plant.)

2. Select *Manufacturing Plant* in the Drill Down box.

3. Click *Pivot* .

4. Click *Run* to execute the report.

Ordering the Data in a Report

You can reverse the order of one or more data elements in an OLAP-enabled report by selecting ascending or descending in the OLAP Control Panel.

See *Sorting Report Lines by Column Values* on page 8-28 for information on changing the sort order of measures.

Procedure **How to Change From Ascending to Descending Order (or Vice Versa)**

1. Open the OLAP Control Panel.

2. Select the element in the report layout box (Drill Down or Drill Across).

3. Click .

4. Click *Run* to execute your report.

Example   **Changing From Ascending to Descending Order**

You have an OLAP-enabled report displaying Budget Units and Budget Dollars sorted by City in alphabetical order.

To sort the report in reverse alphabetical order:

1. Click *OLAP* to open the OLAP Control Panel. (You also can click the square next to City. This opens the OLAP Control Panel with the dimension for City open and highlighted.)

2. Select *City* in the Drill Down box.

3. Click .

■Region	■City	■Category	■Product	⬍ Budget Units	⬍ Budget Dollars
Midwest	Chicago	Coffee	Espresso	32416	401477
			Latte	79015	964787
		Food	Biscotti	30001	385369
			Croissant	43271	528255
			Scone	45091	567231
		Gifts	Coffee Grinder	19224	241711
			Coffee Pot	16035	208255
			Mug	30881	388612
			Thermos	14137	181159
	Houston	Coffee	Espresso	36666	439880
			Latte	77501	941677
		Food	Biscotti	27074	321857

OLAP

4. Click *Run* to execute the report.

PAGE 1

■Region ■City		■Category ■Product		⬍ Budget Units	⬍ Budget Dollars
Midwest	St. Louis	Coffee	Espresso	32787	416875
			Latte	77141	921336
		Food	Biscotti	28764	360403
			Croissant	49327	592609
			Scone	36573	478691
		Gifts	Coffee Grinder	14779	171501
			Coffee Pot	14970	191451
			Mug	26837	324488
			Thermos	15903	189484

● OLAP

Stacking Measures in Rows or Columns

When you have more than one measure, the OLAP Control Panel enables you to stack the measures of your OLAP-enabled report by either rows or columns (the default is rows). You enable this feature by clicking the Stack Measures check box in the OLAP Control Panel.

Note: You cannot apply data visualization when stacking measures. For details, see *Visualizing Trends in OLAP-enabled Reports* on page 8-60.

Procedure **How to Display Stacked Measures**

To stack measures in an OLAP-enabled report:

1. Open the OLAP Control Panel.

2. Select the *Stack Measures* check box to display measures in separate rows, or deselect the *Stack Measures* check box to display measures in columns.

3. Click *Run* to execute your report.

Example **Displaying Measures in Stacked Rows**

You have an OLAP-enabled report showing the City, and Budget Units and Budget Dollars for each City. The measures (Budget Units and Budget Dollars) are displayed in columns.

To display the measures in rows:

1. Click *OLAP* to display the OLAP Control Panel. (You also can click the square next to City or Category. This opens the OLAP Control Panel with the dimension for either City or Category open and City or Category highlighted.)

PAGE 1						
	■Category					
	Coffee		Food		Gifts	
■City	⬍ Budget Units	⬍ Budget Dollars	⬍ Budget Units	⬍ Budget Dollars	⬍ Budget Units	⬍ Budget Dollars
Atlanta	130808	1656902	120915	1530563	82922	1060122
Boston	109434	1388495	113371	1448092	78800	981810
Chicago	111431	1366264	118363	1480855	80277	1019737
Houston	114167	1381557	106236	1308163	79552	990959
Los Angeles	109298	1351864	106877	1339441	79462	978179
Memphis	110128	1366337	113339	1417310	72152	906332
New Haven	109201	1395283	113777	1436890	78389	1000029
New York	117285	1468684	124283	1568925	69819	888713

● OLAP

2. Click the *Stack Measures* check box.

3. Click *Run* to execute the report and display the measure in a stacked row.

PAGE 1				
		■Category		
		Coffee	Food	Gifts
■City				
Atlanta	Budget Units	130808	120915	82922
	Budget Dollars	1656902	1530563	1060122
Boston	Budget Units	109434	113371	78800
	Budget Dollars	1388495	1448092	981810
Chicago	Budget Units	111431	118363	80277
	Budget Dollars	1366264	1480855	1019737
Houston	Budget Units	114167	106236	79552
	Budget Dollars	1381557	1308163	990050

OLAP

Sorting Report Lines by Column Values

The OLAP Control Panel enables you to sort report lines by column values. Sorting on the values of a measure column enables you to gain a new view of the existing data and perform further analysis from a different perspective.

You apply measure-based sorting to an OLAP-enabled report one measure at a time. First, you select a measure from the Measures box in the OLAP Control Panel. Then you click the measure name to open the Measures Properties box where you can define the sort criteria:

•   You can change the sort order from descending to ascending.

•   You can choose to view a limited number of records.

Procedure **How to Sort Report Lines by Column Values**

1. From an OLAP-enabled report:

   • Click the blue diamond next to the measure description. The OLAP Control Panel opens, with the properties box for the selected measure overlaying the Measures box.

     Or

   • Click the *OLAP* button to open the OLAP Control Panel. Click the measure name. The properties box displays for that measure.

2. Click a measure in the Measures box.

   Note:

   • Do not click the Measures check box. Clicking the check box either displays or hides a measure in a report or applies data visualization. It does not open the properties box.

   • The Sort box is checked specifying that the sort criteria you select for this measure will be applied.

3. Select the *High-to-Low* or *Low-to-High* radio button to change the sort order of the measure values. The default sort order is high to low.

   The sort order indicators in the properties box are:

   • The selected sort order radio buttons.

   • The text Highest or Lowest next to the Subset value field.

4. Click *OK* to apply the selected sorting options.

   The properties box is overlaid with the Measures Properties box. The measure description appears in blue to indicate that sorting has been applied to the measure.

5. Click *Run* to display the report with sorting applied to the selected measure.

   The blue diamond of the measure to which you applied sorting, changes to reflect the sort order of the measure. If the sort order is High to Low, the top half is dark blue. If the sort order is Low to High, the bottom half is dark blue.

   Note: If an OLAP request contains an ACROSS field, the measures appear several times in the report, once for each of the different Across values. If the user applies sorting to a measure, the sort is performed on the first column occurrence of this measure. This behavior occurs even if you click the blue diamond next to a different occurrence of this measure.

Example   **Viewing a Report With Sorting Criteria Applied to a Measure**

You have an OLAP-enabled report showing Budget Dollars and Budget Units sorted by Product, State, and City. You want to see which locations have the top-selling products.

PAGE 1				
■ Product	■ State	■ City	⬍ Budget Dollars	⬍ Budget Units
Biscotti	CA	Los Angeles	243607	19378
		San Francisco	273054	21943
	CT	New Haven	587501	46404
	FL	Orlando	516984	41242
	GA	Atlanta	568743	44362
	IL	Chicago	385369	30001
	MA	Boston	616766	48246
	MO	St. Louis	360403	28764
	NY	New York	644415	50502
	TN	Memphis	426292	34945

● OLAP

1. From the Measures box, open the Measures Properties box for Budget Dollars.

The Sort box is checked, specifying that sorting by the values in the Budget Dollars measures will occur. The sort order is high to low.

2. Click *OK* to apply the selected sorting options. The properties box closes.

3. Click *Run* to execute the report.

Notice that the products are ranked by Budget Dollars, but the column order of the report remains the same.

PAGE 1				
■ Product	■ State	■ City	⬍ Budget Dollars	⬍ Budget Units
Latte	CA	San Francisco	982579	79035
Latte	IL	Chicago	964787	79015
Latte	WA	Seattle	954267	72634
Latte	CT	New Haven	953855	74427
Latte	GA	Atlanta	945555	76180
Latte	TX	Houston	941677	77501
Latte	MA	Boston	941438	73874
Latte	NY	New York	922776	73411
Latte	MO	St. Louis	921336	77141
Latte	FL	Orlando	886465	72975

● OLAP

Procedure **How to View a Subset of Data When Sorting Report Lines by Column Values**

You can select to view only a subset of the total number of records in your report.

1. From an OLAP-enabled report:

    • Click the blue diamond next to the measure description. The OLAP Control Panel opens, with the Measures Properties box for the selected measure overlaying the Measures box.

        or

    • Click the *OLAP* button to open the OLAP Control Panel. Click the measure name. The Measures Properties box displays for the selected measure.

2. Click a measure in the Measures box.

    Note: Do not click the Measure check box. Clicking the check box either displays, graphically visualizes, or hides a measure in a report. It does not open the properties box for the selected measure.

3. Verify that the Sort check box is selected. When the Sort check box is selected, sort criteria apply to the selected measure.

4. Select the *Rank* check box in the properties box.

5. Specify the number of sort field values to be included in the report as follows:

    • Use the spin buttons located to the right of the word Highest or Lowest (the sort indicator) to increase or decrease the number of sort fields.

        or

    • Position the cursor in the value field and type a number.

    Highest or Lowest displays to the left of the value field and reflects the sort order.

    The default number of sort field values is 5.

6. Click *OK*. The properties box is overlaid with the Measures box. The OLAP Control Panel displays the measure description in blue to indicate that sorting has been applied to the measure.

7. Click *Run* to display the report.

Example **Using Measure-based Sorting to View a Group of High or Low Values**

You want to view the Product, State, and City information for the top five sales values. You can create this report by applying sorting to the Dollar Sales measure and specifying a rank of the highest five Dollar Sales values.

The following report appears:

Procedure **How to Remove Sorting Criteria From a Measure**

By removing sorting criteria from a measure, you delete the underlying specification to sort the report lines by the measure values. You do not change whether the measure appears in the report. The check box preceding the measure description continues to specify whether the measure is included as a column within the report.

1. From an OLAP-enabled report:

   • Click the blue diamond next to the measure description. The OLAP Control Panel opens, with the properties box for the selected measure overlaying the Measures box.

      or

   • Click the *OLAP* button to open the OLAP Control Panel. Click the blue measure name. The properties box displays for that measure.

2. Click a measure in the Measures box from which you want to remove sorting.

   Note: Do not click the Measure check box. Clicking the check box either displays, graphically visualizes, or hides a measure in a report. It does not open the properties box for the selected measure.

3. Clear the *Sort* check box to remove sorting criteria from the measure.

4. Click *OK*.

   The properties box is overlaid with the Measures box. The OLAP Control Panel displays the measure name in black to indicate that sorting is not applied to this measure.

Suppressing Subtitles When Sorting by Measure Values

Subtitles are the subtotals, subheadings, and subfootings that you may include in your report. When sorting is applied to a measure, the generation of subtitles is suppressed. Subtitles are suppressed because they relate to a specific sort field in a report and may become meaningless when the report is resorted by the measure column values.

Applying Selection Criteria to OLAP-enabled Reports

You can restrict (slice-and-dice) your data using the Selection Criteria panel. This panel helps you define selection criteria quickly and easily. For example, if you want a report that lists only certain products belonging to a specific product family (for example, LINEOFBUS), you would specify selection criteria in which the Product Family is equal to LINEOFBUS by using the = relational operator.

Your report is also limited to values belonging to the parent categories in the dimensions hierarchy. For example, if you are retrieving values based on the Eastern region, only the states that belong to the Eastern region appear in your report. Your report does not list all fifty states. Previously, if no ACCEPT list was defined, the first 500 values in the data source were retrieved.

Limiting applies only to formats that retrieve a list of values and is not available in the Date Selection panel.

The active operator appears to the left of the drop-down list. For a list of all the supported operators, see *Selection Criteria Relational Operators* on page 8-36.

Reference **Selection Criteria Relational Operators**

The Selection Criteria option provides several relational operators:

Operator	Displays Records That...
=	Are equal to the criteria you specified. This is the default operator.
≠	Are not equal to the criteria you specified.
≤	Are less than or equal to the criteria you specified.
<	Are less than, but not equal to the criteria you specified.

Operator	Displays Records That...
	Are greater than or equal to the criteria you specified.
	Are greater than, but not equal to the criteria you specified.
	Contain the criteria you specified. **Note:** This operator is available only for alphanumeric fields.
	Do not contain the criteria you specified. **Note:** This operator is available only for alphanumeric fields.

Note: You can select more than one value using the same relational operator.

The Selection Criteria option provides the following relational operators when selecting a range of dates:

Operator	Diaplays Records Where...
	The value in the indicated date field falls within the specified range. **Note:** To use this relational operator, you must select the Range check box in the Date Selection panel.
	The value in the indicated date field does *not* fall within the specified range. **Note:** To use this relational operator, you must check the Range check box in the Date Selection panel.

Note: You can select only one range of dates at a time.

Applying Selection Criteria to OLAP-enabled Reports

Procedure How to Apply Selection Criteria to an OLAP-enabled Report

1. Click *Selection Criteria*.

2. Click one or more elements in the Dimensions box.

3. Click *Relations* to the left of an element in the Selection Criteria panel to specify a relationship (for example, =, >, or <).

4. Click *Select*.

   A new panel opens, displaying a list of acceptable values for the selected element.

   - If your Managed Reporting Administrator has defined an ACCEPT list of acceptable values, these values display.

   - If there is no ACCEPT list, only values applied within the dimension hierarchy display.

5. Select one or more values from the list or type a value. Click *OK* to confirm your choices.

6. In the Selection Criteria panel, you can continue defining selection criteria. When you are done, click *OK*.

7. Click *Run* to execute your report.

Procedure How to Remove Selection Criteria

1. Select the selection criteria you want to remove.

2. Click *Delete*.

3. Click *OK* to confirm your choice and return to the OLAP Control Panel.

4. Click *Run* to execute your report.

Procedure **How to Change Selection Criteria**

1. Click the relational operator in the OLAP-enabled report to open the OLAP Control Panel. You must click the OLAP button or an element in the Dimensions box to open the OCP as the relational operator does not display.

2. Type a different value in the text box or select one or more values from the list.

   The value you type must be in the same case as the value in the data source.

   To deselect a value, hold down the Ctrl key while clicking the value.

   Note: You can input only one value in the text box. If you select more than one value from the list, only the first value appears. However, all values appear in your report.

3. Click *OK* to return to the Selection Criteria panel and view the value next to the relational operator.

4. Click *OK* again to confirm your choice and return to the OLAP Control Panel.

5. Click *Run* to execute your report.

Example   **Applying Selection Criteria**

You want to restrict the information in your report to the Countries, Argentina and Brazil.

1. Click *Selection Criteria* to open the Selection Criteria panel.

2. In the Dimensions box, click *Country*.

The Country element of the Geographic Area dimension appears in the Selection Criteria panel with a drop-down list.

The equal sign (=) on the button to the left of the Country box indicates that your report will contain data only for those rows where Country is equal to the values that you supply.

3. Click *Select* to open a selection panel listing every Country that has been defined.

Your Managed Reporting Administrator can define a list of acceptable values for the Country field in the Master File using the ACCEPT attribute.

4. Select *Argentina* and *Brazil* from the list.

5. Click *OK* to return to the Selection Criteria panel.

6. Click *OK* to return to the OLAP Control Panel.

7. Click *Run* to execute your report.

Information displays at the bottom of the report telling you that you are restricting the report to Country: Argentina and Brazil (Brazil is the next value in the drop-down list).

Using AutoDrill

AutoDrill provides single-click automatic drill-down to the next lower level in a defined dimension hierarchy. You can drill down to the next lower level in a defined dimension hierarchy by clicking a related data value within the body of an OLAP-enabled report while the OLAP Control Panel is closed. With one click, you can transform the report immediately.

You can enable AutoDrill in output that supports this feature. Currently, AutoDrill is supported only in OLAP-enabled reports. To enable AutoDrill, select DIMENSIONS from the Automatic Drill Down drop-down list on the Report Options tab of Report Assistant.

The Drill Down (or BY) and Drill Across (or ACROSS) fields become hyperlinks. Explicit drill downs in the stylesheet (if they exist) take precedence over AutoDrill hyperlinks. If you click a hyperlink associated with an explicit drill-down, the behavior will be the behavior defined in the stylesheet rather than what is expected for AutoDrill.

Administrators can refer to the *WebFOCUS Managed Reporting Administrator's Manual* for details on how to save a transformed report as a Standard Report. Administrators who also work in WebFOCUS (Windows version) can refer to *Describing OLAP-enabled Data* in online help for this information.

If you save your report in an Excel 2000 file, only explicit drill down works. Drill down via AutoDrill will not work. Pre-Excel 2000 format does not support drill down of any type.

Drill Down on Measures provides the ability to drill down to the last dimensional element under a dimension field in a dimension hierarchy by clicking any measure in a report. For details on Drill Down on Measures, see Chapter 7, *Using OLAP Analysis*.

Using AutoSelection

Autoselection provides multiple selection capability so you can limit the scope of your report by simply clicking specific report elements. Just as you can limit the scope of your report by invoking the Selection Criteria interface, you can perform the same slice and dice (including multiple selection) with fewer mouse clicks directly from your report (while the OLAP Control Panel is open).

Each time you click a hyperlink (Drill Down or Drill Across field) in the report, the field value displays in a selection list at the bottom of the report. The field values limit the scope of the report. When you click Run, the report transforms. This is called Autoselection.

PAGE 1			
		■ Risk Factor	
		3	
■ Continent	■ Country	⇕ Balance	⇕ CANADA_DOLLAR
AMERICAS	CANADA	26,263,063	36,768,288
	UNITED STATES	159,861,394	223,805,952
EUROPE	ENGLAND	10,214,318	14,300,045
	FRANCE	8,857,937	12,401,112

RISK_CLASS

OLAP = Low

Another way of performing Autoselection and reducing the number of required mouse clicks is by clicking the Values subelement defined in the dimension hierarchy in the OLAP Control Panel. The following displays the Values subelements and the Selection Criteria panel in the OLAP Control Panel.

After a value has been added, you can select another value from the report, continue to customize the report using other features of the OLAP Control Panel, or transform the report by clicking Run.

When you run your report after making your selections, the selection values display to the right of the OLAP button at the bottom of your report.

Applying Selection Criteria to Date Elements

You can apply selection criteria to date elements just as you apply them to other types of elements. However, instead of selecting from a list of values, you choose the selection criteria from a Date selection panel containing the appropriate controls for the date format. When you apply selection criteria to date elements, the results are limited by the date(s) you select. For example, you can select to view data associated with a particular date or to exclude data from the specified date.

The OLAP Control Panel provides a Date selection panel that enables you to select a full date format (YYMD) or a partial date format (YMM) that includes only the month or year, and to specify a quarter of the year when applying selection criteria to date elements.

The Master File specifies the date formats available for selection criteria. Additionally, you can select a range of dates by specifying a from and to date. The from date indicates the beginning of a range and the to date indicates the end of a range. The date format must contain a year to enable the Range check box.

For a table describing the selection criteria operators, see *Selection Criteria Relational Operators* on page 8-36.

For more information on available date formats when applying selection criteria, see *Date Format Limitations* on page 8-59. For more information on specifying date formats, see the *Describing Data With WebFOCUS Language* manual.

Note: Selection criteria can be specified for date fields that are defined within a dimension. The Administrator defines the available dimensions in the Master File.

The following Date selection panel displays a full date with the option to select a range of dates:

Procedure **How to Apply Selection Criteria to Individual Date Fields**

1. From the OLAP Control Panel, click *Selection Criteria*.

2. Select one or more date elements in the Dimensions box.

    If you select more than one date element, each element is listed separately in the Selection Criteria panel with its own Select button.

3. Click a relations button to the left of an element in the Selection Criteria panel to specify a relationship (for example, =, >, or <).

4. Click *Select*.

    The Date selection panel opens displaying the controls for the dimension's date format. For example, if the date format is YYM, only the year and month controls appear.

5. Specify a date using the spin controls, drop-down lists, or by typing the value.

    If your date format includes edit masking such as Y.M.D, the date always displays with forward slashes in the Date selection list box, Selection Criteria panel, and in the drop-down list at the bottom of the report. However, the date edit mask always displays as specified within the body of the report.

6. Click *Add* to display the date in the Selections list box.

7. Click *OK* to return to the Selection Criteria panel and view the selected date.

    You can continue defining selection criteria.

    When you are done, click *OK*.

8. Click *Run* to execute your report.

Note: The Date selection panel displays only when a supported date format is provided. For more information on available date formats, see *Date Format Limitations* on page 8-59.

Example   **Applying Selection Criteria to Individual Date Fields**

You want to restrict the information in your report to data associated with the date June 6, 2001.

1. From the OLAP Control Panel, click *Selection Criteria*.

2. In the Dimensions box, click *Date Problem Reported*.

The date element of the Time Period dimension appears in the Selection Criteria panel with a drop-down list.

The relational operator to the left of the Date box indicates that your report will contain data only for those rows where date is equal to the values that you enter.

3. Click *Select*. The Date selection panel opens:

4. Change the year to 2001 in the Year box by using the spin buttons or typing the value.

5. Select *June* from the Months drop-down list to change the calendar month.

6. Select *6* from the Days drop-down list to change the calendar day.

7. Click *Add*. The date you selected appears in the list.

8. Click *OK* to return to the Selection Criteria panel.

9. Click *OK* to return to the OLAP Control Panel.

10. Click *Run* to execute your report.

The date element displays at the bottom of the window.

Procedure **How to Apply Selection Criteria to a Date Range**

1. From the OLAP Control Panel, click *Selection Criteria*.

2. Click one or more date elements in the Dimensions box.

   If you select more than one date element, each element is listed separately in the Selection Criteria panel with its own Select button.

3. Click *Select* to open the Date Selection panel.

4. Click the *Range* check box.

   From and To drop-down lists open displaying the controls for the dimension's date format. For example, if the date format is YYM, only the year and month controls appear.

   By default, the current date appears.

   Note: You can apply selection criteria to a range of dates only if the date format contains a year. For more information on available date formats, see *Date Format Limitations* on page 8-59.

5. Specify a date using the spin controls, drop-down lists, or by typing the value.

   Note: Values entered are restricted to valid values for each date component control.

6. Click *OK* to return to the Selection Criteria panel.

7. To view both the from and to dates of the range selected, click the down arrow on the drop-down list.

8. Click a relational operator to the left of an element in the Selection Criteria panel to specify a relationship, and click *OK*.

   Only the range equal and range not equal relational operators are available.

9. Click *Run* to execute your report.

Example   **Applying Selection Criteria to a Range of Date Fields**

You want to restrict the information in your report to data associated with dates ranging from June 1, 2001 to January 1, 2002.

1. From the OLAP Control Panel, click *Selection Criteria*.

2. In the Dimensions box, click *Date Problem Reported*.

    The date element of the Time Period dimension appears in the Selection Criteria panel with a drop-down list.

3. Click *Select*. The Date selection panel opens.

4. Select the *Range* check box.

    From and To drop-down lists open where you can enter a range of dates. By default, the current date appears.

5. Specify the From date as follows:

    a. Change the current year to 2001 by using the spin buttons.

    b. Select *June* from the Months drop-down list to change the current calendar month.

    c. Select *1* from the Days drop-down list to change the current calendar day.

6. Specify the To date as follows:

    a. Change the current year to 2002 by using the spin buttons.

    b. Select *January* from the Months drop-down list to change the current calendar month.

    c. Select *1* from the Days drop-down list to change the current calendar day.

7. Click *OK* to return to the Selection Criteria panel.

To view the range of dates, click the down arrow in the drop-down list.

Then, click *OK* again.

8. Click *Run* to execute your report.

The date element displays at the bottom of the screen.

To view the range of dates, click the arrow in the drop-down list.

Location Problem Occurred	Problem Category	Date Problem Reported
Consumer	Mechanical Failure	2001/06/02
		2001/06/19
		2001/06/26
		2001/06/30
		2001/07/28
		2001/07/31
		2001/08/11
		2001/08/14
		2001/08/21

Date Problem,Reported

OLAP   R   2001/06/01 ▾

Adding and Deleting Dates Using the Selections List Box

The Selections list box enables you to view a list of dates that have been selected previously. You can create a list of dates by selecting a date value(s) from the date controls and adding it to the Selections list box. After a date has been added to this list box, you can either select it or remove it from the list.

Note: You cannot add or delete a range of dates in the Selections list box. To remove a range, delete the dimension from the Selection Criteria panel.

Procedure **How to Add Dates to the Selections List Box**

1. Click the *OLAP* button located at the bottom of the browser screen to open the OLAP Control Panel.

2. Click *Selection Criteria* to open the Selection Criteria panel.

3. Click *Select* to open the Date selection panel.

4. Provide the full or partial date you want to add by using the spin buttons, drop-down lists, or by typing the value.

5. Click *Add*. The date appears inside the Selections list box.

Procedure **How to Delete Dates From the Selections List Box**

1. Click the *OLAP* button located at the bottom of the browser screen to open the OLAP Control Panel.

2. Click *Selection Criteria* to open the Selection Criteria panel.

3. Click *Select* to open the Date selection panel.

4. Select one or more dates that you want to remove from the Selections list box.

5. Click *Delete*. The date is removed.

Date Format Limitations

The following limitations apply to date formats when applying selection criteria to date elements:

- The Date selection panel does not support Julian dates. However, if you are using Julian dates, the OLAP Calendar still opens.

- The Date selection panel does not allow you to select a day of the week.

  When you provide a date format that is supported by the Date selection panel (wrMtrDYY), the Date selection panel is invoked and selects the date.

  Currently, there is no display option that enables you to select a day of the week.

- Dates containing only a day format (D, I2D, A2D) are not supported when using the Date selection panel. Instead, the data source provides a list of values.

- The Range check box is enabled on the Date selection panel when the date format contains a year and is one of the following formats:

  - New date format (smart dates: for example, YMD, MDY, YYMD, MDYY)

  - A4YY

  - I4YY

  - I8YYMD

  - A8YYMD

  - I6YYM

  - A6YYM

Define Century and Year Threshold

When handling dates using two-digit year values, or when specifying a range of dates, the Master File should specify values for DEFCENT (define century) and YRTHRESH (year threshold) to ensure that the appropriate century is referenced.

When specifying DEFCENT and YRTHRESH in the Master File, the Date selection panel allows you to select only from the specified date range. For example, if the DEFCENT is 19 and the YRTHRESH is 80, the Date selection panel only allows the selection of dates from 1980 to 2079. If the year field is 79, then the year is interpreted as 2079. If the year field is 00, then the year is interpreted as 2000.

For more information, see the *Working With Cross-Century Dates* in the *Developing Reporting Applications* manual.

StyleSheet Transformation

WebFOCUS supports StyleSheet transformation. This means that when you create a report using the advanced features of Report Assistant or Report Painter, you can manipulate your report using the OLAP Control Panel without losing customizations (such as conditionally-styled data visualization graphs).

When you change the number of columns in a report by adding or deleting dimensions, by pivoting dimensions, or by adding or removing measures in the OLAP Control Panel, the relative position of a column in a report changes. Similarly, a drill down dimension can become a drill across dimension.

The styling options of the original report are preserved when you run the report from the OLAP Control Panel. The preservation occurs regardless of any data manipulation you perform.

Visualizing Trends in OLAP-enabled Reports

To make your reports more powerful, you can insert visual representations of selected data directly into the report output. These visual representations are in the form of vertical or horizontal bar graphs that make relationships and trends among data more obvious.

You use the OLAP Control Panel to specify those measures for which you want to apply data visualization. See Chapter 9, *Visualizing Trends in Reports* for details.

Troubleshooting OLAP-enabled Reports

This topic describes common problems that you might encounter when working with OLAP-enabled reports.

The report is not OLAP-enabled. Ensure that Run with OLAP in the Properties window for the report is selected.

If the Run with OLAP property is selected, ensure that the metadata for the report uses the WITHIN attribute to define one or more hierarchical dimensions.

The report displays the OLAP button, but the OLAP Control Panel does not open. Ensure that your Web browser supports the WebFOCUS Product. To access the WebFOCUS Product, you can use the following Web browsers:

- Microsoft® Internet Explorer 4.01 Version 4.72 and higher.

- WebFOCUS (Windows version) provides the Desktop Viewer for displaying OLAP reports.

The OLAP Control Panel does not display dimensions. Ensure that the metadata for the report uses the WITHIN attribute to create one or more hierarchical dimensions.

You cannot drill-down or roll up a dimension. Ensure that the metadata for the report uses the WITHIN attribute to create one or more hierarchical dimensions.

You cannot include additional measures in the report. You cannot use the OLAP Control Panel to include measures that are not included in the original report request.

Tip:

- You can specify NOPRINT in the report procedure to make measures available but not visible in the original report. Deselect the Visible check box in the Field Options dialog box accessible from the Fields tab of Report Assistant, thereby including the measure as a NOPRINT field in the report procedure. Then, the measure does not display when you first run the report, but you can select to include the measure and run the report again.

- To print all fields in a report you must specify each field. The PRINT * command (which prints the entire contents) is not recognized by OLAP.

The FOC3250 message displays: OLAP and On-demand Paging are mutually exclusive. OLAP and On-demand Paging cannot be enabled at the same time. Either deselect Run with OLAP in the Report Properties window or deselect the On-demand Paging check box in the Report Assistant Options tab.

When you click the OLAP button in a graph, the OLAP Control Panel does not open. OLAP currently is not implemented for GRAPH requests. Deselect Run with OLAP in the Report Properties window.

If you use Print *, an error occurs.

If you create a fex that uses Print *, and you then OLAP-enable and run the fex (selecting *Save output as PDF file* from the OCP), an error is returned. OLAP does not support Print *; it prints the entire contents.

CHAPTER 9

Visualizing Trends in Reports

Topics:

- Applying Bar Graphs
- Associating Bar Graphs With Measures

To make your HTML reports more powerful, you can insert visual representations of selected data directly into the report output. These visual representations are in the form of vertical or horizontal bar graphs that make relationships and trends among data more obvious.

Applying Bar Graphs

Vertical and horizontal bar graphs highlight relationships and trends among data.

- **Vertical Bar Graph.** You can apply a vertical bar graph to report columns associated with an ACROSS sort field. The report output displays a vertical bar graph in a new row above the associated data values.

Region							
Midwest		Northeast		Southeast		West	
Dollar Sales	**Difference from Budget**	Dollar Sales	**Difference from Budget**	Dollar Sales	**Difference from Budget**	Dollar Sales	**Difference from Budget**
11400665		11392310		11710379		11652957	
	-$206,292.00		$184,622.00		$97,602.00		-$11,444.00

Bar graphs that emanate above the zero line represent positive values, while bar graphs that emanate below the zero line represent negative values.

- **Horizontal Bar Graph.** You can apply a horizontal bar graph to report columns. The report output displays a horizontal bar graph in a new column to the right of the associated data values.

City	Budget Dollars	Dollar Sales	DIFFERENCE	
Atlanta	$4,247,597.00	$4,100,107.00	$147,490.00	▬▬
Boston	$3,818,397.00	$3,707,986.00	$110,411.00	▬
Chicago	$3,866,856.00	$3,924,401.00	-$57,545.00	▪
Houston	$3,680,679.00	$3,714,978.00	-$34,299.00	▪
Los Angeles	$3,669,484.00	$3,772,014.00	-$102,530.00	▬
Memphis	$3,689,979.00	$3,687,057.00	$2,922.00	▏
New Haven	$3,832,202.00	$3,782,049.00	$50,153.00	▪
New York	$3,926,333.00	$3,902,275.00	$24,058.00	▪
Orlando	$3,870,405.00	$3,923,215.00	-$52,810.00	▪
San Francisco	$3,916,863.00	$3,870,258.00	$46,605.00	▪
Seattle	$4,055,166.00	$4,010,685.00	$44,481.00	▪
St. Louis	$3,646,838.00	$3,761,286.00	-$114,448.00	▬

Bar graphs that emanate to the right of the zero line represent positive values, while bar graphs that emanate to the left of the zero line represent negative values.

The length of each vertical or horizontal bar graph is proportional to the magnitude of its associated data value. The shortest bar graph displays for the value with the minimum magnitude, the longest bar graph for the value with the maximum magnitude, and bar graphs of varying length are displayed for each value within the minimum-maximum magnitude range. Notice in the previous figure that a value of 147,490.00 produces a longer horizontal bar graph than a value of 50,153.00. Therefore, a complete row of vertical bar graphs or a complete column of horizontal bar graphs forms a bar chart.

You can only apply data visualization bar graphs to numeric report columns (integer, decimal, floating point single-precision, floating point double-precision, and packed). Bar graphs applied to alphanumeric, date, or text field formats are ignored.

You can display data visualization bar graphs in OLAP-enabled HTML reports using the OLAP Control Panel, where bar graphs are applied to measures. See *Associating Bar Graphs With Measures* on page 9-3.

Associating Bar Graphs With Measures

From the OLAP Control Panel, you can associate data visualization bar graphs with any numeric measure that appears in the report output.

The type of bar graph that you can apply depends on the placement of the dimensions included in the report. If all report dimensions are listed in the Drill Down box, you can apply a horizontal bar graph to the specified measures. If a dimension is listed in the Drill Across box, you can apply a vertical bar graph to the specified measures.

For more information about OLAP-enabled reports and the OLAP Control Panel, see Chapter 8, *Manipulating Data in an OLAP-enabled Report*.

Data Visualization Bar Graph Attributes

The following are the default attributes used to display data visualization bar graphs applied from the OLAP selections panel or the OLAP Control Panel:

Bar graph attribute	Default value
Color	Positive values: Blue Negative values: Red
Length	Vertical bar graph: 60 pixels Horizontal bar graph: 80 pixels
Width	The size of the font in the report output is used to define a default value for the width of the bar graph.

Note: Currently, you cannot modify bar graph attributes from the OLAP selections panel or the OLAP Control Panel.

Applying Data Visualization Bar Graphs to Measures

You can apply data visualization bar graphs to any numeric measure listed in the Measures box. To indicate the measures for which you want to display bar graphs, you click the check box located to the left of each measure. This check box has three states that control the display modes for the measure:

Check Box State	Display Mode for the Measure
☑ Check mark	Displays the measure.
📊 Graph icon	Applies a bar graph to the measure and displays both the measure and its associated bar graph.
☐ Blank box	Does not display the measure or an associated bar graph.

You click the check box next to a measure until it reflects the display mode you want. For an illustration, see *Determining the Display Mode for Measures* on page 9-5.

If an OLAP-enabled report request contains a NOPRINT measure, that measure is not displayed in the report. The Measures box, however, does list the measure with a blank check box. To deactivate NOPRINT and display this measure, click the check box once. To display the associated bar graph, click the check box again.

Note: The three-state check box is *not* active when you apply Stack Measures to your report. If you apply Stack Measures, you can only choose to display or not display a measure; you cannot apply bar graphs to any measure. Once you apply bar graphs to a measure, you cannot apply the Stack Measure feature to the report. In other words, these features are mutually exclusive.

Example **Determining the Display Mode for Measures**

The following shows the location of the Measures box in the lower right corner of the OLAP Control Panel.

The state of each measure's check box determines how the measure displays in the report output. From the above OCP, you can determine:

- The COST and PRICE measures will display in the output (check mark in the boxes).

- The Profit measure and its associated bar graph will display in the output (Graph icon in the box).

- The same symbols display when you click the Measures arrow in the OLAP selections panel.

Procedure **How to Apply Data Visualization Bar Graphs to a Measure**

From the OLAP selections panel:

1. Click the arrow to the left of the Measures control.

2. Click the check box beside each numeric measure to which you want to add a bar graph. The check mark in the box is replaced with the Graph icon.

3. Click *Run*. The new report displays with the associated bar graphs.

OR

1. Click the *OLAP* button in the OLAP selections panel to open the OLAP Control Panel. The Measures box displays in the lower right corner.

2. If Stack Measures is applied to the report, click the *Stack Measures* check box to turn off this feature.

3. To apply data visualization bar graphs to a measure, click the check box to the left of the measure.

    To apply data visualization graphics to a NOPRINT measure, click the check box twice.

    The check mark in the box is replaced with the Graph icon. This icon indicates that data visualization bar graphs are applied to the measure. (If you have not done so in step two, this also deactivates the Stack Measures feature.)

    You can apply data visualization bar graphs to as many numeric measures as you want.

4. After you select all the measures for which you want to display bar graphs, click *Run*.

    The new report output displays with the associated bar graphs.

5. To continue to modify the report (either data visualization or another OLAP configuration), click the *OLAP* button again.

Procedure **How to Remove Data Visualization Bar Graphs From a Measure**

1. From the Measures drop-down list in the OLAP selections panel or the Measures box in the OLAP Control Panel, click the check box for any measure to which you have applied data visualization bar graphs.

    This removes the Graph icon and displays a blank check box indicating that the measure will not appear in the report output when you run the report.

2. To display the measure, click the same check box again. A check mark appears in the box.

3. Click *Run* to display the new report output, where the measure displays without its associated bar graph.

Example   **Applying Data Visualization Bar Graphs to Measures**

Suppose that you want to associate data visualization bar graphs with the Profit column in the following report in order to represent visually the differences between the Costs for and the Prices of your various Products. You have created the following OLAP-enabled report:

Product Name:	Our Cost:	Price:	Profit
110 VHS-C Camcorder 20 X	744,759.00	1,043,859.00	299100
120 VHS-C Camcorder 40 X	796,943.00	1,227,723.00	430780
150 8MM Camcorder 20 X	1,303,440.00	1,732,489.00	429049
2 Hd VCR LCD Menu	185,889.00	257,939.00	72050
250 8MM Camcorder 40 X	251,520.00	313,614.00	62094
330DX Digital Camera 1024K P	32,437.00	45,477.00	13040
650DL Digital Camcorder 150 X	940,750.00	1,191,175.00	250425
750SL Digital Camcorder 300 X	105,750.00	140,859.00	35109
AR2 35MM Camera 8 X	64,385.00	88,835.00	24450
AR3 35MM Camera 10 X	13,395.00	18,189.00	4794
Combo Player - 4 Hd VCR + DVD	1,166,404.00	1,610,364.00	443960
DVD Upgrade Unit for Cent. VCR	754,909.00	1,080,769.00	325860
QX Portable CD Player	245,916.00	419,796.00	173880
R5 Micro Digital Tape Recorder	297,459.00	383,679.00	86220
ZC Digital PDA - Standard	233,313.00	280,163.00	46850
ZT Digital PDA - Commercial	1,376,805.00	1,968,555.00	591750

To associate data visualization bar graphs with the Profit column:

1. Click the *Measures* drop-down list in the report (or open the OLAP Control Panel by clicking the *OLAP* button).

The check marks indicate that the measures will display in the report output.

2. Click the *Profit* check box again.

The Graph icon replaces the check mark. This icon indicates that the measure will display with its associated bar graph.

3. Click *Run* to display the new report output.

▼ Measures ▼ Graph	PLANT	STATE	STORE
	≡ --All-- ▼	≡ --All-- ▼	≡ --All-- ▼
YEAR	QUARTER	MONTH	PRODTYPE
≡ --All-- ▼	≡ --All-- ▼	≡ --All-- ▼	≡ --All-- ▼
PRODCAT	PRODNAME		
≡ --All-- ▼	≡ --All-- ▼		

| | OLAP | Run | Reset |

PAGE 1				
Product ■Name:	Our ⊖ Cost:	⊖ Price:	⊖ Profit	
110 VHS-C Camcorder 20 X	744,759.00	1,043,859.00	299100	▬▬
120 VHS-C Camcorder 40 X	796,943.00	1,227,723.00	430780	▬▬▬
150 8MM Camcorder 20 X	1,303,440.00	1,732,489.00	429049	▬▬▬
2 Hd VCR LCD Menu	185,889.00	257,939.00	72050	▌
250 8MM Camcorder 40 X	251,520.00	313,614.00	62094	▌
330DX Digital Camera 1024K P	32,437.00	45,477.00	13040		
650DL Digital Camcorder 150 X	940,750.00	1,191,175.00	250425	▬▬
750SL Digital Camcorder 300 X	105,750.00	140,859.00	35109	▌
AR2 35MM Camera 8 X	64,385.00	88,835.00	24450		
AR3 35MM Camera 10 X	13,395.00	18,189.00	4794		
Combo Player - 4 Hd VCR + DVD	1,166,404.00	1,610,364.00	443960	▬▬▬
DVD Upgrade Unit for Cent. VCR	754,909.00	1,080,769.00	325860	▬▬
QX Portable CD Player	245,916.00	419,796.00	173880	▬
R5 Micro Digital Tape Recorder	297,459.00	383,679.00	86220	▌
ZC Digital PDA - Standard	233,313.00	280,163.00	46850	▌
ZT Digital PDA - Commercial	1,376,805.00	1,968,555.00	591750	▬▬▬▬

Notice that the report now contains a new column to the right of the Profit measure. This column displays a horizontal bar chart comprised of bar graphs that represent the individual data values for the Profit measure.

CHAPTER 10

Using the WebFOCUS Viewer

Topics:

- Navigating a Report With the WebFOCUS Viewer

- Using the Viewer Control Panel

- Creating On-demand Paging Reports

The WebFOCUS Viewer improves your ability to handle long reports by allowing you to view a single page of report output. You can use the WebFOCUS Viewer to:

- View single pages of long reports.

- Search for specific pages in a report.

- Search for specific strings of information.

- Deliver a full report to your Web server.

The WebFOCUS Viewer uses the On-demand Paging facility. When On-demand paging is enabled, WebFOCUS saves the bulk of your report to your Web server and delivers one page of report output at a time, decreasing the amount of time you wait for your report to process. The bulk of your report remains on the Web server until you request it or close the WebFOCUS Viewer.

Navigating a Report With the WebFOCUS Viewer

When you run a report designated for On-Demand Paging, the WebFOCUS Viewer opens automatically and displays the first page of the report. The WebFOCUS Viewer consists of two frames: the Report Frame and the Viewer Control Panel.

PAGE 1

Product Code	Unit Price	Product	Order Number	Order Date	Ordered Units
B141	58.00	Hazelnut	1	01/01/96	300
			2	01/01/96	117
			16	01/01/96	285
			17	01/01/96	140
			31	01/01/96	349
			46	01/01/96	240
			61	01/01/96	509
			76	01/01/96	358
			91	01/01/96	179
			106	01/01/96	583
			121	01/01/96	37
			136	01/01/96	448
			151	01/01/96	267
			166	01/01/96	363
			167	01/01/96	535

Page 1 of 87

The Report Frame is the larger frame and contains one page of report output. When you first run a report, the Report Frame contains the first page of report output. The Viewer Control Panel contains the controls that allow you to display specific pages, deliver the entire report to your Web server, and search your document for particular strings of information.

Using the Viewer Control Panel

The Viewer Control Panel frame (along the bottom of the screen) contains the controls you use to navigate through the report and to search for a string in the report. The Viewer Control Panel's navigational controls allow you to display the next or previous page, the first or last page, or a specific page. You use the searching function to have the Viewer locate a search string you specify within all report pages.

Note: When specifying a search string, you must specify the actual number of spaces between characters because HTML displays a single space, even when multiple spaces are used between characters.

Procedure **How to Navigate Through a Report**

The Viewer Control Panel offers several ways to view pages in your report:

- To display a specific page:

  a. Enter a page number in the Page input box.

  b. Click *Go to Page*.

- To display the previous or the next page in sequence, click *Previous* or *Next*.

- To display the first or last page of the report, click *First Page* or *Last Page* .

- To download the entire report to the browser as a single document, click *All Pages.*

- To close the WebFOCUS Viewer, click *Close.*

Searching a Report

The Viewer Control Panel contains controls that offer several ways to search your report. Using the Viewer's search controls, you can select a string of information, such as a phrase that occurs in your report or a group of numbers, and search for each occurrence of that string. You can further customize your search by matching capitalization of words exactly (a case-sensitive search) or by controlling the direction of your search (either forward or backward from your starting point in the report). Use these controls to search your report:

- To perform a case-sensitive search, click *Match Case*.

- To search backward in your report, click *Search Backward*.

- To locate a specific string, type the string you want to search for and click *Find*.

Procedure   **How to Search the Report**

1. Enter the string in the Search input box.

2. Click *Match Case* if you want to perform a case-sensitive search.

   Notice that the WebFOCUS Viewer displays the Match Case button with a red line across it to indicate that it is active.

3. To begin your search, click:

   a. *Search Backward* to search for the string from the current page back to the first page, or

   b. *Find* to search from the current page to the end of your report.

   The WebFOCUS Viewer searches the report and underlines the first occurrence of the string.

4. Click *Find* again to search for another occurrence of the string.

Using the Viewer Control Panel to Search

You want to use the Viewer Control Panel to navigate a long report called Coffee Sales to find occurrences of the string "Kona," a type of coffee that you sell. After you run the report, WebFOCUS displays the first page of the report in the WebFOCUS Viewer.

1. To search for sales of Kona, type Kona in the input box and click *Find*.

The WebFOCUS Viewer returns your report with the first occurrence of your search
string underlined.

```
                         4260 12/01/97    230
                         4261 12/01/97    175
                         4274 12/01/97    254
                         4275 12/01/97    194
                         4276 12/01/97    380
                         4289 12/01/97    307
                         4290 12/01/97    427
                         4291 12/01/97    306
                         4304 12/01/97    221
                         4305 12/01/97    396
                         4306 12/01/97    149
                         4307 12/01/97    376
    B144    76.00 Kona     35 01/01/96    471
                           50 01/01/96    377
                           80 01/01/96     47
                          125 01/01/96    510
                          140 01/01/96     38
                          155 01/01/96    347
                          215 02/01/96    472
```

Page 25   of 87   Kona

2. Click *Find* again to locate the next occurrence of Kona.

Creating On-demand Paging Reports

You can create your own On-demand Paging report from Report Assistant. You can run this report immediately or in deferred mode. Note that On-demand Paging is not currently available with OLAP-enabled reports. For more information on running a report in deferred mode, see Chapter 5, *Creating a Report With Report Assistant*.

Procedure **How to Create an On-demand Paging Report**

1. From the Domains list window, select the Reporting Objects tab.

2. Select a Reporting Object from the list.

3. Click *Report Assistant*.

   Report Assistant opens.

4. Add fields and customize your report. For more information on creating reports with Report Assistant, see Chapter 5, *Creating a Report With Report Assistant*.

5. Click the Report Options tab and check the *On-demand Paging* check box.

6. Click *Run* to view your report.

   WebFOCUS displays your report within the WebFOCUS Viewer.

   Note: The WebFOCUS Viewer is launched over a blank browser screen. This screen is necessary for the operation of the WebFOCUS Viewer. It must be closed separately from the WebFOCUS Viewer.

7. To return to Report Assistant, close the WebFOCUS Viewer and close the blank browser page.

8. Close Report Assistant.

   WebFOCUS prompts you to save your report before exiting.

Example **Creating an On-demand Paging Report**

You want to select On-demand Paging for a report on the sale of coffee products called Coffee Sales.

1. Navigate to the Domains view.

2. Open the Regional Sales domain.

3. From the Reporting Objects tab, expand the Product Sales group folder and select Coffee Sales.

4. Open Report Assistant.

Report Assistant displays the Fields dialog box with the fields already selected for the report.

5. Select the Report Options tab. The Report Options window opens:

6. Check the *On-demand Paging* check box to enable On-demand Paging.

7. Click *Run* to run Coffee Sales immediately.

WebFOCUS displays the first page of Coffee Sales in the WebFOCUS Viewer:

```
PAGE 1


Product  Unit              Order  Order    Ordered
Code    Price  Product   Number  Date      Units

B141   58.00  Hazelnut       1  01/01/96     300
                            2  01/01/96     117
                           16  01/01/96     285
                           17  01/01/96     140
                           31  01/01/96     349
                           46  01/01/96     240
                           61  01/01/96     509
                           76  01/01/96     358
                           91  01/01/96     179
                          106  01/01/96     583
                          121  01/01/96      37
                          136  01/01/96     448
                          151  01/01/96     267
                          166  01/01/96     363
                          167  01/01/96     535
```

8. Click *Close* on the WebFOCUS Viewer.

WebFOCUS notifies you that the report has been deleted from the server.

Using PDA Sync

Topics:

- PDA Sync Requirements

- Subscribing to a Channel

- Viewing Standard Reports on Your PDA

- Viewing Deferred Reports on Your PDA

If you are using a Pocket PC or Palm OS® Personal Digital Assistant (PDA) and your Managed Reporting Administrator has made the WebFOCUS PDA Sync feature available to you, you can receive WebFOCUS Managed Reporting-based Standard Reports and Deferred Reports on your PDA. Only HTML reports, text reports, and GIF-based graphs are supported by AvantGo™, which enables you to view content on your PDA.

PDA Sync Requirements

To receive Standard Reports on your PDA, your Managed Reporting Administrator must already have performed the following functions:

- Enabled a Standard Report for PDA Sync.

- Created an AvantGo channel from the current Managed Reporting Repository.

- Authorized you to use PDA Sync.

Subscribing to a Channel

WebFOCUS Standard Reports are enabled for sync via a publish and subscribe approach. After a channel is published by the Managed Reporting Administrator, you must subscribe to that channel in order to receive any data.

You automatically receive a subscription created by your Managed Reporting Administrator when you sync your PDA.

For more information about synchronization, see the AvantGo documentation and the documentation for your PDA.

Viewing Standard Reports on Your PDA

After you synchronize your PDA (via HotSync or PC ActiveSync), you are ready to view WebFOCUS Standard Reports.

Procedure **How to View WebFOCUS Standard Reports on Your PDA**

After synchronizing your PDA, perform the following steps:

1. Select the *Applications* icon .

The Applications window opens:

2. Select *AvantGo*.

The AvantGo channels window opens:

3. Select the channel you wish to navigate (for example, PDA Sync).

The WebFOCUS login page opens:

4. Enter your Managed Reporting security credentials on the login page and click *Sign On*.

The Domains window opens:

You only need to enter your security credentials the first time you sync your PDA. Every time thereafter, a persistent cookie is held on the AvantGo Enterprise Server on behalf of your registered device. The cookie holds your Managed Reporting login information.

5. Select the Domain you wish to navigate (for example, PDA Sync).

The report folders within that Domain appear:

6. Select the report you want to view (for example, Sales Report by Category).

The Sales Report by Category report appears:

Due to space limitations, the entire report does not display on the screen. You can view the rest of the report by using the navigation arrows located at the side and bottom of the screen.

7. To return to the previous menu options, select the back arrow ◀▮ located on the top right toolbar.

Viewing Deferred Reports on Your PDA

Your Managed Reporting Administrator can also flag WebFOCUS Deferred Reports for PDA Sync. To view Deferred Reports on your PDA, you need to access AvantGo as described in the first four steps of the previous procedure, *How to View WebFOCUS Standard Reports on Your PDA* on page 11-2.

Procedure **How to View Deferred Reports on Your PDA**

1. Select the Domain you wish to navigate from the Domain's window.

   The report folder within that Domain opens:

2. Select the Deferred Report (for example, Sales Report by Category - Deferred).

The following window opens:

3. Select *Defer* to submit the request. The following window opens:

4. Click *OK*. The following window opens:

5. Sync your reports and then return to AvantGo.

For more information about synchronization, see the AvantGo documentation and the documentation for your PDA.

6. Select *Deferred Reports* to see a listing of all Completed and Queued Deferred Reports.

The Deferred Status window opens:

In this example, the Sales Report by Category - Deferred report displays four times, since it was synchronized four times.

7. Select the report you want to view (for example, Sales Report by Category - Deferred).

The report opens:

CHAPTER 12

Using Two-Way Email

Topics:

- Two-Way Email User Steps
- Subscribing for the First Time
- Replying to the Confirmation Message
- Receiving Your Templates for the First Time
- Requesting a Report
- Updating Your Subscription Information
- Responding to an Alert

Two-Way Email enables mobile business professionals to request and receive WebFOCUS reports through e-mail, using a handheld device, laptop, or desktop. From any location, at any time, users have access to their company's enterprise data.

To request a report, a user simply replies to and sends an e-mail that contains a Two-Way Email template. A template is the means by which a request is made and parameter values are supplied if required. A Managed Reporting Administrator or Domain Admin creates and maintains templates for a user.

This topic explains the steps that a user performs to enable the Two-Way Email capability. It also describes what a template looks like, and how to use one to request a report. Finally, it addresses alert response for those sites that have licensed and installed both ReportCaster and Two-Way Email.

Two-Way Email User Steps

As a user, you perform the following steps that enable Two-Way Email:

1. Subscribe to Two-Way Email by accessing and supplying information on an HTML subscription page. See *Subscribing for the First Time* on page 12-2.

   You can also ask your Managed Reporting Administrator to subscribe you from the Two-Way Email Administrator console.

2. Reply to the confirmation message sent by Two-Way Email. This message acknowledges your subscription request and validates your Reply-To e-mail address. See *Replying to the Confirmation Message* on page 12-5.

3. Receive and store your Two-Way Email templates in your inbox, or in a folder on your e-mail program. The Managed Reporting Administrator or Domain Admin creates these templates for your use. Each template is associated with a Managed Reporting Standard Report of interest to you. See *Receiving Your Templates for the First Time* on page 12-6.

4. Request a report simply by selecting, replying to, and sending a template. See *Requesting a Report* on page 12-7.

5. Update your subscription information if it changes. See *Updating Your Subscription Information* on page 12-10.

Subscribing for the First Time

Two-Way Email provides a subscription page accessed from a Web browser. You can display the subscription page on your desktop, laptop, or any handheld device that supports the Web.

Use the subscription page to independently subscribe to Two-Way Email for the first time.

On the subscription page, you must supply a valid Managed Reporting user ID and password. You must also supply a WebFOCUS Reporting Server user ID and password, unless they are stored for you on the server. If you do not know the required security information, ask your Managed Reporting Administrator for it.

After you subscribe, you receive a confirmation message through e-mail. Once you reply to it, Two-Way Email sends you all the templates you are authorized to use.

Procedure **How to Subscribe for the First Time**

1. Your site has a Web address for the Two-Way Email subscription page. Ask your Managed Reporting Administrator for the address if you do not know it.

    From your browser, access the subscription page by entering the Web address. For example,

    `http://server_name/rcaster/twoway/mobile/twoway.htm`

    where:

    `server_name`

    Is the name of the Web server.

2. Enter your Managed Reporting user ID and password as assigned by the Managed Reporting Administrator.

    Click *Subscribing to Two-Way Email for the first time*, as shown on the following window:

3. Click *Continue*. A window like the following opens:

4. If applicable at your site, select *Default* to use the WebFOCUS Reporting Server user ID and password stored for you on that server. Otherwise, enter your security credentials for the WebFOCUS Reporting Server.

5. Enter your e-mail address. Two-Way Email will use this address to send you Two-Way Email templates and WebFOCUS reports when you request them. The syntax is:

name@domain

where:

name

    Is your e-mail user name.

domain

    Is the domain name.

Important: You must include the character @.

6. Click *Add me* to add your new subscription.

A message informs you that Two-Way Email added your address to the database:

7. You have the opportunity to add another e-mail address to your subscription information, or to view the information already supplied. Just click *Continue*.

Close the Two-Way Email window when you are done.

Replying to the Confirmation Message

After receiving your subscription request and validating your security credentials, Two-Way Email sends you a confirmation message through e-mail. It acknowledges your request and makes sure it has your correct e-mail address by using it to send the message.

How to Reply to the Confirmation Message

1. Check your mailbox for e-mail from Two-Way Email. When it is delivered, open it. A window like the following opens:

```
From:     twoway_server@yourcompany.com                    Sent: Mon 2/5/01 3:57 PM
To:       salesuser@yourcompany.com
Cc:
Subject:  Two-Way mail subscription

Please reply to this mail and type your MRE User ID in the first line.
Thanks.



----------
<TWOWAY>
PFNVQj5jYXJvbGluZV9yZWljaGVsQGliaS5jb208L1NVQj44K
</TWOWAY>
```

2. As prompted, reply to the e-mail. Type your Managed Reporting user ID on the first line of the reply.

   If your device or program has an option to include the body of the e-mail (for example, *Reply with Text* or *Include Original Text*), select it. This option ensures that the content of the template is included in the reply. Two-Way Email requires the content to correctly process the reply.

3. Click or tap *Send* to send your reply to Two-Way Email.

Receiving Your Templates for the First Time

After you subscribe for the first time and reply to the confirmation message, Two-Way Email sends you all the templates you are authorized to use for your reporting needs.

Check your mailbox for their delivery. When they arrive, store them in your inbox, or in a folder on your e-mail program.

Requesting a Report

Once you receive and store your templates, you can request a WebFOCUS report. A template is the means by which you request a report and supply parameter values if required.

A Two-Way Email template contains information about the associated report. It may also prompt you for one or more parameter values that define the scope of the report. If a template prompts you for a value, you must supply one; otherwise, the report will not run.

A report template may request an update to a data source rather than a report.

The following is a sample template that requests a report:

```
Enter a product category on line 1 of your reply.
Valid product categories are Coffee, Food, Gifts.

----------

<TWOWAY>
YXBwL3RvdGFscmV0LnR4dCwjdGVsbG11dGVzdHNuLHByb2dyYW1tL3By
b2dyYW1tLmh0bSwwLjE4OTQ5NTI3NDE0NjIxMDky
</TWOWAY>
```

The tags <TWOWAY> and </TWOWAY> delimit an encrypted Extensible Markup Language (XML) stream describing the report to run, including its associated domain. Two-Way Email needs this information to retrieve the report code from the Managed Reporting Repository, and route it to the WebFOCUS Reporting Server for execution.

The prompt at the top of the sample template instructs you to supply a parameter value on line 1 of your reply. In this case, you must enter the name of a product category that exists in the data source, such as Coffee, Food, or Gifts. If you enter Coffee, the report will contain only data that applies to that category.

How to Request a Report

1. Double-click or tap the e-mail that contains the template for the desired report.

   The subject of the e-mail typically identifies or describes the report.

2. Click or tap *Reply*.

   If your device or program has an option to include the body of the e-mail (for example, *Reply with Text* or *Include Original Text*), select it. This option ensures that the content of the template is included in the reply. Two-Way Email requires the content to correctly process the reply.

3. If the report requires a parameter value, type it on the first line of the reply. Type multiple values on successive lines, each on a line by itself.

   To accept the default value of a parameter, type a period (.) on the applicable line in your reply. This action ensures that Two-Way Email will read the value properly.

   The e-mail may indicate valid values from which you can choose. If it does not and you are not sure how to respond, ask your Managed Reporting Administrator or Domain Admin.

4. Click *Send* or tap *Done*.

   Two-Way Email will return the requested report to you.

Requesting a Report With a Parameter

Suppose you want a report that shows the number of units sold, and the total dollar amount of sales, for a particular product category. The report is associated with a Two-Way Email template called Sales Report for User-supplied Category : TW. It requires a parameter value for the product category of interest.

A Managed Reporting Administrator or Domain Admin can create the Standard Report and template for you, as described in the *WebFOCUS Managed Reporting Administrator's* manual.

1. Double-click or tap the e-mail called *Sales Report for User-supplied Category : TW*.

2. The template prompts you for the product category and shows the possible values:

   ```
   Enter a product category on line 1 of your reply.
   Valid product categories are Coffee, Food, Gifts.
   ```

3. Click or tap *Reply*.

   If your device or program has an option to include the body of the e-mail (for example, *Reply with Text* or *Include Original Text)*, select it. This option ensures that the content of the template is included in the reply. Two-Way Email requires the content to correctly process the reply.

4. Enter *Food* on line 1 as the parameter value.

5. Click or tap *Send*. Two-Way Email sends the report to you:

```
PAGE     1

Category     Unit Sales   Dollar Sales
--------     ----------   ------------
Food           1384845       17229333
```

Example   **Accepting the Default Value of a Parameter**

Suppose you want a report that shows the number of units budgeted, and the number of units sold, for a particular product category and store code. The report is associated with a Two-Way Email template called Budgeted Units by Category and Store Code : TW.

For the product category, you can supply a value or accept the default. For the store code, you must accept the value provided by the Administrator.

A Managed Reporting Administrator or Domain Admin can create the Standard Report and template for you, as described in the *WebFOCUS Managed Reporting Administrator's Manual*.

1. Double-click or tap the e-mail called *Budgeted Units by Category and Store Code : TW*.

2. The template prompts you as follows:

```
Enter a product category on line 1 of your reply.
Valid product categories are Coffee, Food, Gifts.
You can accept the default, which is Gifts.
To accept the default, enter a period (.) on line 1 of your reply.
```

It also informs you that the only allowed store code value is R1019.

3. Click or tap *Reply*.

If your device or program has an option to include the body of the e-mail (for example, *Reply with Text* or *Include Original Text)*, select it. This option ensures that the content of the template is included in the reply. Two-Way Email requires the content to correctly process the reply.

4. You want to accept the default, Gifts. As instructed, enter a period on line 1 of your reply.

5. Click or tap *Send*.

Two-Way Email sends the report to you:

```
PAGE     1

Category   Store ID  Budget Units  Unit Sales
--------   --------  ------------  ----------
Gifts      R1019           79552       78869
```

Updating Your Subscription Information

Use the subscription update page to perform the following:

- Add a new e-mail address to the Two-Way Email database. The address will be associated with your subscription information.

- Delete an existing e-mail address from the Two-Way Email database.

- Refresh your Two-Way Email templates (that is, have them resent to you) if you accidentally delete one, or if the Managed Reporting Administrator or Domain Admin creates or modifies a template for you.

- Update your WebFOCUS Reporting Server security credentials if they change.

Procedure **How to Access the Subscription Update Page**

1. **From your browser,** access the subscription page by entering the Web address that applies to your site. For example,

   `http://server_name/rcaster/twoway/mobile/twoway.htm`

   where:

   `server_name`

   Is the name of the Web server.

2. Enter your Managed Reporting user ID and password as assigned by the Managed Reporting Administrator.

3. Click *Updating a current Two-Way Email subscription*, as shown on the following window:

4. Click *Continue.* The next window allows you to perform update tasks, as described in the procedures that follow.

Procedure **How to Add a New E-mail Address**

1. In the Email address field, type the new address.

2. Click *Add.* The following window opens:

3. Click *Continue* to return to the subscription update page to perform other tasks or review what you have done. Close the window when you are finished.

Two-Way Email sends a confirmation message to the new e-mail address. Once you reply to the message, the address is activated, and Two-Way Email sends the templates you are authorized to use.

Procedure **How to Delete an Existing E-mail Address**

1. In the list of current addresses, select the one you want to remove, as shown on the following window:

2. Click *Delete*. You are asked if you are sure you want to delete the address:

3. Click *OK* to remove the address from the database.

Click *Cancel* to discontinue the procedure and return to the previous window.

4. If you attempt to delete the only e-mail address associated with your subscription, the entire subscription (user account) will be cancelled. You are asked if you are sure you want to proceed with that action.

   Click *OK* to delete your subscription, or click *Cancel* to discontinue the procedure. If you click *OK*, Two-Way Email informs you that you are not in its user database:

Procedure   How to Refresh Your Templates

1. From the list of current addresses, select the address to which you want to send the templates.

2. Click *Refresh*. A message informs you that fresh copies of your templates will be sent to the address specified.

Procedure   How to Update Your Security Credentials

1. Enter your new WebFOCUS Reporting Server user ID and password in the appropriate fields.

2. Click *Update*. A message informs you that your user ID and password have been updated.

Responding to an Alert

Two-Way Email alert response is available only at sites that have licensed and installed both ReportCaster and Two-Way Email. For more information on ReportCaster, see the *WebFOCUS Managed Reporting Administrator's Manual* and *WebFOCUS Technology Guide*.

A Managed Reporting Administrator or Domain Admin can attach a Two-Way Email template to a ReportCaster Alert. As a user, you are alerted when certain pre-defined data conditions are met. You can use the attached Two-Way Email template to respond to the alert to request a report for more detail.

Example   **Responding to an Alert**

A Managed Reporting Administrator or Domain Admin can create the sample alert and template for you, as described in the *WebFOCUS Managed Reporting Administrator's Manual*.

You are alerted when the total dollar sales for coffee for store code R1019 exceed $1,000,000. The alert takes the form of a report showing the exact amount of dollar sales.

Attached to the report is a template, prompting you for another store code of interest, for comparison purposes. You will respond to the alert by supplying a store code value and sending the template. Your response generates a second report, showing the dollar sales for coffee for the supplied store code. You can then compare the two reports.

1. Periodically check your inbox for an alert from Two-Way Email, named Coffee Sales Alert. When it is delivered, open it and view the report. A template will be attached to it:

    ```
    PAGE    1

    Category     Store ID   Dollar Sales
    --------     --------   ------------
    Coffee       R1019          1393610


    Enter a store code on line 1 of your reply.
    Valid store codes are R1088, R1109, R1250.

    ----------

    [TWOWAY]
    YXBwL3RvdGFscmV0LnR4dCwjdGVsbG1ldGVzdHNuLHByb2dyYW1tL3By
    b2dyYW1tLmh0bSwwLjE4OTU5NTI3NDE0NjIxMDky
    [/TWOWAY]
    ```

2. Notice that the template prompts you for a store code.

3. Click or tap *Reply*.

If your device or program has an option to include the body of the e-mail (for example, *Reply with Text* or *Include Original Text*), select it. This option ensures that the content of the template is included in the reply. Two-Way Email requires the content to correctly process the reply.

4. Enter the store code you are interested in.

5. Click or tap *Send*.

Two-Way Email sends the comparison report to you. For example, if you requested information on store code R1088, you receive the following:

```
PAGE     1

Category     Store ID   Dollar Sales
--------     --------   ------------
Coffee       R1088           1375040
```

CHAPTER 13

Using Java Applet Managed Reporting

Topics:

- Accessing Managed Reporting
- Using Domains in Java-based Managed Reporting
- Running a Report
- Sharing a Report
- Creating a Report or Graph
- Editing a My Report
- Filtering Data
- Searching a Domain

WebFOCUS Managed Reporting utilizes Java technology so that you can run Standard Reports that are defined in advance by an Administrator. You can also create, edit, and save reports that meet your individual needs. You do not need to know the complexities of the underlying databases or the FOCUS language to create and run reports. You create reports and graphs using the set of graphical tools and components described in Chapter 1, *Introducing WebFOCUS Managed Reporting*.

Managed Reporting allows you to run WebFOCUS with a Java applet-enabled browser. Your Administrator selects the Managed Reporting Interface for you and associates it with your user profile. When you sign on, WebFOCUS automatically launches the Java version of Managed Reporting.

This chapter describes Java applet Managed Reporting and provides procedures for running reports and creating your own reports using blocks of data your Administrator has created for you. You will also learn how to submit reports to run in the deferred mode and how to apply filters and other parameters.

The examples provided in this chapter have been developed to demonstrate the procedures and concepts described in this manual in practical terms similar to those you might encounter in everyday business life. Though WebFOCUS includes sample files that your Administrator may use to develop similar examples for you to actually work with, these examples are not included as part of Managed Reporting.

Accessing Managed Reporting

To access Managed Reporting, the Web server, WebFOCUS Client, and WebFOCUS Reporting Server must all be started. All three can be started as Windows services by selecting *Administrative Tools* and then *Services* from the Control Panel.

Procedure **How to Access Managed Reporting**

1. Launch your Web browser and enter the following Uniform Resource Locator (URL):

   `http://`*webserver*`/ibi_html/workbnch/mrlogon.htm`

   where:

   webserver

   Indicates the name of the Web server that runs Managed Reporting.

   The Welcome/Logon page opens.

   If you need to change your password, see *How to Change Your Password* on page 13-2.

2. Enter your user ID and password.

3. Click the *Submit* button.

   If you entered your correct user ID and password, the Domains environment opens:

   If you did not enter your correct user ID or password, WebFOCUS prompts you to return to the Welcome/Logon page where you can login your information again.

   Note: If the Managed Reporting Logon page does not appear, contact your administrator.

Procedure **How to Change Your Password**

1. Click *Change Password* on the Managed Reporting logon page.

The Change Password window opens:

2. Enter your user ID in the User input box.

3. Enter your current password in the Password input box.

4. Enter your new password in the New Password input box.

5. Enter your new password again in the Confirm Password input box.

6. Click *Submit* to have WebFOCUS change your password and return you to the previous screen.

    Now, when you log on to Managed Reporting, use your new password.

Reference **WebFOCUS Managed Reporting User Privileges**

To gain access to Managed Reporting, the WebFOCUS Managed Reporting Administrator assigns you one of the following privileges:

User Can run reports or run deferred. The user can invoke Report or Graph Assistant from the Reporting Objects tab. However, the user cannot save from the assist tools, OLAP slice-n-dice options, or Deferred Report Status interface.

Analytical User Has access to the Java version of the domains reporting environment and any domain that you associate with the user. The user can run Standard Reports or saved reports from those domains, as well as create My Reports using the Reporting Objects in those domains. You can create My Reports by checking the appropriate user capability.

HTML User Has access to the HTML version of the domains reporting environment and any domain that you associate with the user. This user can only run Standard Reports. The user cannot save or create My Reports. For more information, see Chapter 14, *Using HTML-based Managed Reporting*.

Using Domains in Java-based Managed Reporting

When Managed Reporting opens, WebFOCUS displays a list of domains available to you in a tree within the left hand frame of the dual paned Domains Interface. Before you can produce a report or graph in Managed Reporting, you must choose a domain from the Domains Interface. For more information on domains, see Chapter 1, *Introducing WebFOCUS Managed Reporting*.

The right hand pane of the Domains Interface remains empty until you select a domain. When you select a domain, WebFOCUS displays the contents of the domain in four tabs on the right - Standard Reports, My Reports, Shared Reports, and Reporting Objects.

As you navigate within a domain, the domain tree view remains constant. Domains are developed by an Administrator to provide logical groupings for data and to protect access to confidential information. Your Administrator will also create group folders or subgroup folders as subdirectories to further divide information.

The left and right pane size can be adjusted by dragging the bar separating the left and right panes. Horizontal and vertical scrolling is enabled when the content of a particular tab is too wide or long to fit the screen.

Note: The arrows only bring the tab into view. You must click on the tab to actually select it and load the information in the frame.

Using the Toolbar

Perform the following tasks using the toolbar buttons:

Button	Description
New	Adds a new component. For example, if you highlight the Domains folder and then click *New*, you create a new domain.
Open/Close	Opens/closes a selected object.
Edit Source	Displays the WebFOCUS code for the selected object (report, procedure, or launch page) in the text editor window.
Search	Enables you to search the selected domain, folder, or object.

Button	Description
Refresh	Updates the contents of the Managed Reporting Repository window. This button is useful when more than one Administrator is working in Managed Reporting. Changes one Administrator makes to the Repository may not always be visible to other Administrators.
Run	Executes the selected report or displays the selected launch page.
Run Deferred	Executes the selected report in deferred mode.
Deferred Status	Displays the Deferred Report Status Interface in a new browser window.
Publish	Creates an HTML launch page for the selected report. For more information, see Chapter 7, *Publishing Reports*, in the the *WebFOCUS Managed Reporting Development and Administration Manual.*.
ReportCaster	Enables you to access ReportCaster. For more information, see the *WebFOCUS ReportCaster Administrator's Manual*.
Report Library	Enables you to access the content in the Report Library.
Cut	Removes an object (Standard Report, Reporting Object, launch page, or Other File) from the domain and copies it to the clipboard.
Copy	Copies an object to the clipboard.
Delete	Removes the selected folder or object.
Paste	Places a clipboard item into a domain. **Note:** You must select a group folder within a domain to activate the Paste button.
Properties	Displays the name and data source of the selected object.
Help	Displays online help.

Procedure **How to Choose a Domain**

1. Access Managed Reporting.

   WebFOCUS opens the Domains Interface.

2. To open a domain, double-click the folder to the left of the domain name.

   WebFOCUS displays the contents of the domain in four report tabs in the right-hand pane of the Domains Interface.

The Domains Interface contains the following tabs:

Standard Reports   Lists reports or graphs created by your Administrator for you to run.

My Reports   Lists reports or graphs you created and saved.

Shared Reports   Consists of folders named for the users who contributed Shared Reports.

Reporting Objects   Lists simple views of your company's data that you use to build reports.

Running a Report

There are three types of reports you can run directly from the Domain window: Standard Reports, My Reports, and Shared Reports. You can run each type of report immediately or as a Deferred Receipt report. To run a report immediately, refer to the procedure below or see *Running a Deferred Receipt Report* on page 13-11 for information on using deferred mode.

You can view a Shared Report, but you cannot modify it when you run it from the Shared Reports tab. To edit a Shared Report, you must first save it to your My Reports tab. See *How to Copy a Shared Report* on page 13-17.

Procedure **How to Run a Standard Report**

1. Select a Domain from the left-hand pane of the Domains Interface.

2. In the Standard Reports tab, select the Standard Report you want to run.

3. Click *Run* on the toolbar.

    If your Administrator has defined filters for the Standard Report, WebFOCUS opens the Filters selection window.

4. If filters are available and you want to use them to limit data displayed in the report, follow this procedure:

    a. Expand the Filters group folders in the Filters Selection window.

    b. Select the filters you want to use and click *Add.* For more information on building filtering criteria, see *Filtering Data* on page 13-21.

        WebFOCUS displays the filter icon with a red check mark and adds the selection criteria to the Filter Criteria box (lower box in the Filter Selection dialog box).

    c. Click *OK* to apply the filters to the report and return to the Standard Reports tab.

    Notice that the filters you selected appear below the Standard Report.

5. Click *Run*.

    WebFOCUS displays the report.

6. Close the browser to return to the Standard Reports tab.

Example **Running a Standard Report**

Suppose you want to run a report computing salaries in the Sales Department.

1. Open the Corporate Personnel Information domain.

2. Open the Sales Department group folder under the Standard Reports tab.

3. Select *Current Salary Report*.

4. Click *Run.*

You may be prompted to supply a WebFOCUS Reporting Server ID. For more information, see *Dynamic Server Signon Feature* on page 2-15.l

Current Salary Report opens in a separate browser window.

```
PAGE 1


EMP ID     LAST NAME    FIRST NAME  CURR SAL  CURR JOBCODE  EFFECT DATE
071382660 STEVENS       ALFRED      $11,000.00 A07
112847612 SMITH         MARY        $13,200.00 B14
117593129 JONES         DIANE       $18,480.00 B03                82/11/01
119265415 SMITH         RICHARD      $9,500.00 A01
119329144 BANNING       JOHN        $29,700.00 A17                83/01/01
123764317 IRVING        JOAN        $26,862.00 A15                83/03/01
126724188 ROMANS        ANTHONY     $21,120.00 B04
219984371 MCCOY         JOHN        $18,480.00 B02
326179357 BLACKWOOD     ROSEMARIE   $21,780.00 B04                82/12/01
451123478 MCKNIGHT      ROGER       $16,100.00 B02                84/09/01
543729165 GREENSPAN     MARY         $9,000.00 A07
818692173 CROSS         BARBARA     $27,062.00 A17                83/05/01
```

5. Close Current Salary.

You return to the Standard Reports tab.

Procedure **How to Run a My Report**

1. Click the My Reports tab in the Domain window.

WebFOCUS lists the saved reports and graphs under the Reporting Object used to create them.

2. Select the report or graph name.

3. Click *Run.*

WebFOCUS displays saved reports.

Procedure **How to Run a Shared Report**

1. Click the Shared Reports tab in the Domain window.

    WebFOCUS displays folders with the names of users who have contributed reports.

2. Double-click a user name.

    The user name expands to display the Reporting Object group folders.

    The Reporting Object group folders were used to create the Shared Report.

3. Double-click the Reporting Object group folder and then the subgroup folder that contains the Shared Report you want to run.

    Note that appears next to the name of the report.

4. Select the report and then click *Run*.

    WebFOCUS displays the report.

5. Close the browser to return to the Shared Reports tab.

Running a Deferred Receipt Report

Deferred Receipt allows you to submit reports for processing and retrieve the results later. You do not have to wait for a report to process and return to your browser. You can submit a report in any format, including OLAP-enabled reports and reports flagged for On-demand Paging for Deferred Receipt.

A Managed Reporting Administrator can also designate a Standard Report or Reporting Object to only run in deferred mode. To determine if a Standard Report or Reporting Object is designated as a Deferred Receipt Report, see *How to View Report Properties* on page 13-14.

After you submit a report for Deferred Receipt, you use the Deferred Report Status Interface to:

*   Monitor the status of a Deferred Receipt report.

*   View the report output.

*   Delete a report.

*   Save a Deferred Receipt report.

*   Review or change parameters in a Deferred Receipt report.

See Chapter 4, *Using the Deferred Report Status Interface*, for more information.

Procedure **How to Submit a Report for Deferred Receipt**

1. Log on to Managed Reporting.

2. Expand the domain containing the report you want to run in deferred mode.

3. WebFOCUS opens the domain in the right hand pane of the Domains Interface.

4. Select a group folder from the Standard Reports tab, the My Reports tab, or the Shared Reports tab.

5. Select a Standard Report, My Report, or Shared Report and click *Run Deferred*.

   You may be prompted to supply a WebFOCUS Reporting Server ID. For more information, see *Dynamic Server Signon Feature* on page 2-15.

6. If the report contains variables, an intermediate window (HTML form) opens, prompting you to insert a value in the input box.

7. Enter a value in the input box.

8. Click *Submit*.

   The Deferred Report Notification window opens to display notification of successful or unsuccessful submission of the deferred request.

9. Close the Deferred Report Notification window to return to Managed Reporting.

10. Click *Deferred Status* to view the status of the Deferred Receipt request using the Deferred Report Status Interface.

See Chapter 4, *Using the Deferred Report Status Interface*, for more information about monitoring and viewing Deferred Receipt requests.

Example **Submitting a Deferred Report**

Suppose you want to run a report computing salaries in the Sales Department while you continue to work on other Managed Reporting applications.

1. Open the Corporate Personnel Information domain.

2. Open the Sales Department group folder under the Standard Reports tab.

3. Select *Current Salary Report*.

4. Click *Run Deferred* on the toolbar. The Deferred Report Notification window opens, confirming that Current Salary has been successfully submitted for Deferred Receipt.

5. Close the Notification window to return to the Standard Reports tab.

6. When you want to view Current Salary, access the Deferred Report Status Interface by clicking *Deferred Status*. For more information, see Chapter 4, *Using the Deferred Report Status Interface*.

7. Click *View* under the Options column to view Current Salary or click *Save* to save Output of Current Salary to the Output folder under your My Reports tab.

How to View Report Properties

You can view report properties to determine whether your Administrator has designated a Standard Report or Reporting Object as a Deferred Receipt Report.

1. Select a report from the Standard Reports tab.

2. Click *Properties* on the Domain window toolbar. If the report is a Deferred Receipt Report, Run: Deferred appears in the Properties dialog box after the folder name.

3. Click *Cancel* to exit the Properties dialog box and return to the Domain window.

Saving Deferred Receipt Reports

You can save Deferred Report output when the report status is Completed. When you save Deferred Report output, WebFOCUS removes the report from the Deferred Report Status Interface and creates a new group folder, Deferred Reports Output, on the My Reports tab. WebFOCUS then saves the Deferred Report output to this group folder.

There is one Deferred Reports Output group folder for each domain. Report output contained within the Deferred Reports Output folder is static and can only be viewed. WebFOCUS disables the Run Deferred option for any report contained in the Deferred Receipt Report Output group.

Procedure **How to Save a Deferred Receipt Report**

1. Open a domain.

2. Select the Standard Reports or My Reports tab.

3. Click *Deferred Status*.

   The Deferred Report Status Interface opens.

4. Select a Deferred Receipt report from the Completed tab.

5. Click *Save* in the Options column for this report.

   WebFOCUS saves the Deferred Receipt report results to the My Reports tab, Deferred Reports Output group folder, and deletes the Deferred Receipt report from the Deferred Report Status Interface. The My Report name is the description that WebFOCUS displayed in the Deferred Report Status Interface as well as the date and time the My Report was created.

6. Close the Deferred Report Status Interface.

Reviewing Deferred Request Parameters

You can review or change parameters and then resubmit a Deferred Receipt report from the Deferred Report Status Interface when the report status is Completed. This option allows you to retrieve specific data contained within the report.

Procedure **How to Retrieve Deferred Receipt Request Parameters**

1. Open a domain.

2. Select the Standard Reports or My Reports tab.

3. Click *Deferred Status*.

   The Deferred Report Status interface opens.

   Note: Click *Refresh* to obtain the most current status of deferred requests.

4. Locate the report description under the Completed tab.

5. Click *Parameter* under the Options column heading.

   An intermediate window (HTML form) opens.

   a. To review and accept the original parameters, close the browser window.

   b. To change the parameters, enter new values for any parameters on the HTML form.

   c. Click *Submit*.

   The original request is run with the parameters you just selected.

   The Deferred Report Notification window opens to display notification of successful or unsuccessful submission of the deferred request.

6. Close the Deferred Report Notification window to return to the Deferred Report Status Interface.

Sharing a Report

Frequently you create reports or graphs that you may want to share with others in your organization. The Shared Reports feature addresses this need by enabling you to create reports and make them available to other users who access the same domain.

By designating a report as shared, you allow others to run the report. The report is run from a fourth tab in the Domain window, called Shared Reports. Another user cannot edit a Shared Report from the Shared Reports tab. However, a user can copy and save a Shared Report to their own My Reports tab. After saving the report to the My Reports tab, the user can then modify it without affecting the original report.

The Administrator designates who may make reports and graphs available to others. All users (except HTML users) who access the Domains window, have the ability to view shared reports. All users who access the same domain may run and copy reports designated as shared from the Shared Reports tab. Note that this does not include HTML users who cannot run reports and Run-only users who cannot copy reports.

Using the Shared Reports Tab

Shared Reports is one of the tabs in the Domains Interface. The tab consists of folders named for the users who contributed Shared Reports. When you expand a folder, all the reports contributed by a particular user display under a Reporting Object group folder or subgroup folder. These reports are available to all other Managed Reporting users who can access the domain.

You can use the Deferred Status, Help, Open, and Refresh buttons without selecting a report. To use the other buttons, you must expand a folder and select the report you want to run or save.

- To run a Shared Report immediately, click *Run* and follow the procedure in *How to Run a Shared Report* on page 13-11.

- To run a Shared Report at a later time, click *Run Deferred.*

- To check the status of a Shared Report that has been run deferred, click *Deferred Status* to open the Deferred Status window and view information.

- To save the report to your My Reports tab, click *Save As My Report* and follow the procedure in *How to Copy a Shared Report* on page 13-17.

- To ensure that you are viewing the most current list of Shared Reports and graphs, click *Refresh* to update the list.

- To view the file name, date, time, and other information, click *Properties*.

Designating a Report as Shared

When you share a report, others with access to the domain can run it (except HTML users), or copy it (except Users) to their My Reports tab. The My Reports that you contribute appear in the Shared Reports tab. These reports also appear in your My Reports tab with a shared icon to denote that they have been made available to others. You can share a report in two ways:

- You can designate a My Report as a Shared Report by clicking the *Share Report* check box in the report's Properties dialog box. See *How to Share a My Report* on page 13-17.

  or

- You can designate a new report as a Shared Report when you save the report from Report Assistant or Graph Assistant. This can be done by clicking the *Share Report* check box in the Save dialog box when you are ready to save a new My Report. See *How to Share a New Report* on page 13-17.

Only users who have been granted the Shared privilege by their Administrator can share a My Report.

Procedure **How to Share a My Report**

To make an existing report available:

1. Click the My Reports tab.

2. Double-click the Reporting Object group folder and then the subgroup folder that contains the report you want to share.

3. Select the report.

4. Click *Properties* to open the Properties dialog box.

5. Click the *Share Report* check box near the bottom of the Properties dialog box.

6. Click *OK*.

The dialog box closes, and the report becomes available to every user who accesses the domain. You return to the My Reports tab.

Procedure **How to Share a New Report**

To make a report or graph that you are currently creating available to others:

1. Click *Save* after you make your selections in the reporting tool.

2. When the Save New Report dialog box opens, enter a descriptive name for the report.

3. Click the *Share Report* check box.

4. Click *OK*.

The dialog box closes, and the report becomes available to every user who accesses the domain. You return to the My Reports tab.

Procedure **How to Copy a Shared Report**

After you copy a Shared Report to your My Reports tab, you can modify the report without affecting the original one. You can treat it as if it were your own report—for example, you can edit the report or delete it.

1. Click the *Shared Reports* tab in the Domain window.

    WebFOCUS displays folders with the names of users who have contributed reports.

2. Double-click a user name.

    The user name expands to display the Reporting Object group folders.

    The Reporting Object group folders were used to create the Shared Report.

3. Double-click the Reporting Object group folder and then the subgroup folder that contains the Shared Report you want to copy.

4. Select the report and then click *Save As My Report* on the toolbar.

   The Save As My Report dialog box opens.

   You can keep the original name or you can change the name of the report by deleting the original name and typing a new one.

5. Click *OK*.

   WebFOCUS copies the report to your My Reports tab.

Procedure **How to Edit a Shared Report**

1. After you copy a Shared Report, click the My Reports tab.

2. Double-click the Reporting Object group folder and then the subgroup folder that contains the report.

3. Select the report and then click *Open*.

   WebFOCUS opens the reporting tool used to create the report or graph and displays the report or graph you copied from the Shared Reports tab.

You can make your modifications and save the current changes or you can delete the report if you wish.

Creating a Report or Graph

The basis for every report or graph you create is a Reporting Object. Reporting Objects contain the fields that you select in a reporting tool to build your report or graph. Once you select the fields for your report, you can manipulate and style the data to suit your needs. The fields you select define the data that your report output displays. A Reporting Object may also contain a template, created by your Administrator, that defines the formatting styles for your report.

The first two steps in creating a report or graph are:

1. Choosing the Reporting Object.

   When you create a new report, you must choose a data source to build your report. Data in Managed Reporting is stored in Reporting Objects and organized within group folders or subgroup folders. The Reporting Object group folders and the Reporting Objects they contain are designed by a professional developer or your Administrator. Reporting Objects are the information sources that you report from.

2. Choosing the reporting tool.

   After you select the data source, you must choose a reporting tool:

   a. Choose Report Assistant to create basic reports quickly and easily.

   b. Choose Graph Assistant to create graphs and charts in a wide range of colors and styles.

Procedure   **How to Choose a Reporting Object**

1. From the Reporting Objects tab, select a Reporting Object from the list window.

   or

2. From the My Reports tab, click *New* and select a Reporting Object from the list window. Now, you must choose your reporting tool.

Procedure   **How to Choose Your Reporting Tool**

1. To open Report Assistant, click *Report Assistant*.

2. To open Graph Assistant, click *Graph Assistant*.

   The chosen tool opens, and you are ready to create a report or graph. For more information on using Report Assistant, click *Help*. See Chapter 5, *Creating a Report With Report Assistant*, for more information.

Example   **Using a Reporting Object**

The following example assumes you use Report Assistant to create your report. You can also select Graph Assistant to create your report. For more information on using Graph Assistant, see Chapter 5, *Creating a Report With Report Assistant*. You want to build a report on Accessory Sales.

1. Open the Regional Sales Domain.

2. Select the Reporting Objects tab.

   WebFOCUS displays a list of group folders.

3. Expand the Product Sales group folder.

4. Select Regional Product Sales.

5. Click *Report Assistant* to open your reporting tool.

6. Select the data and options you want to apply to your report.

7. To save your report, click *Save* on the Report Assistant window.

   Your report will be saved to the My Reports tab under the Product Sales group folder.

8. To return to Managed Reporting, click *Quit* on the Report Assistant window.

Editing a My Report

When you save a report or graph in a reporting tool, WebFOCUS stores it under the My Reports tab in the Domain window. This tab lists the saved report or graph under the same Reporting Object group folder that contains the Reporting Object you used to create the report or graph. WebFOCUS stores deferred report output in the My Reports tab under the Deferred Output group folder.

Procedure   **How to Edit a Saved Report or Graph**

1. From the Domains window, click the My Reports tab.

2. Select the report or graph you want to edit from the Report and Graphs list box.

3. Click *Open*.

   The reporting tool you used to create the report or graph opens, showing your previous specifications.

4. Make your modifications and save the changes.

5. Exit the reporting tool.

   WebFOCUS returns you to the My Reports tab.

Filtering Data

Filters let you decide what data to display in a report, without having to create selection criteria. You simply select the pre-defined filters to limit data. Data must match this criteria to be included in your report. You can select one filter for a simple filtering expression or you can select multiple filters from more than one group to create complex filtering expressions.

The Filters tab is divided into two boxes: the selection box (top box) and the filtering criteria box (lower box). The selection box displays the filter groups (in boldface type) and the filters they contain. The filtering criteria box displays the filters that you select.

See *Simple Filtering Criteria* on page 13-21 and *Complex Filtering Criteria* on page 13-22 for information on the types of filtering criteria you can build and how these criteria limit data.

Simple Filtering Criteria

Simple filtering criteria consist of one or more filters from the same filter group. If you select only one filter, the data must match that filter to be included in the report. If you select multiple filters from the same filter group, data must match only one filter to be included in the report.

For example, if you select the Gifts and Food filters from the Choose a Product filter group, data would only have to match one of the filters for WebFOCUS to include it in the report. Therefore, any Product sold that is in either the Gifts or Food category would satisfy the criterion for this report.

The filtering criteria box (bottom) displays the logical relationship between criteria. Notice that the word "or" is added to clarify this relationship.

Complex Filtering Criteria

Complex filtering criteria consist of one or more filters from multiple filter groups. Data must match one filter from each filter group to be included in a report.

For example, if you select the Gifts filter from the Choose a Product filter group and the West filter from the Choose a Region filter group, data must match both criteria to be included in your report. Therefore, only Gifts purchased in the West will be displayed by WebFOCUS. In this case, the phrase "And any of the following:West" is added to clarify the logical relationship between criteria.

Procedure **How to Run Procedures With Filters**

To run a procedure with a filter in Managed Reporting your Administrator must create a report with filters attached. The filters that your Administrator attaches are grouped in categories and are displayed under filter group folders.

1. From the Domains Interface, double-click the Domain name you want.

   WebFOCUS displays the contents of the Domain you selected in the right hand pane of the Domains Interface.

2. In the Standard Reports tab, expand the group folder containing the report with filters attached.

3. Select the Standard Report and click *Filters*.

   The Filter Selection window opens.

4. Expand the filter group folders.

   WebFOCUS displays a list of filters that your Administrator has developed.

5. Select the filter you want to apply and click *Add* from the panel on the right side of the Filter Selection window.

   The filter you select displays with a check mark in the upper portion of the Filter Selection window and the filter name is added to the filtering criteria box (bottom).

6. When you are finished selecting filters, click *OK*.

   You return to the Standard Reports tab. The filters you selected are displayed under the report name and will be applied automatically when you run the report.

7. To run your report, click *Run*.

   WebFOCUS displays your report in a new browser window with only the data matching the criterion you selected.

Note: If you wish to change your filter selection you must return to the Filter selection window. Select the filters you want to Add or Remove and click the appropriate button.

Example   **Running Reports With Filters**

You want to run a report with attached filters called Product Sales. From the Domains Interface:

1. Double-click the folder next to the Sales Domain.

WebFOCUS displays the contents of the Sales Domain in the right hand pane of the Domains Interface.

2. From the Standard Reports tab, expand the Regional Sales group folder.

3. Select *Product Sales* from the list displayed beneath the group folder and click *Filters* on the toolbar.

The Filters Selection window opens.

4. Expand the Choose a Product filter group and the Choose a Region filter group.

5. Select the Gifts filter from the Choose a Product filter group and click *Add* to apply it to your report.

Notice that the Gifts filter is added to the filter criteria box.

6. Select the West filter from the Choose a Region filter group and click *Add* to apply it to your report.

Notice that WebFOCUS displays the criterion you selected as "Gifts And any of the following: West" in the filtering criteria box.

7. Click *OK* to return to the Standard Reports tab.

8. To run Regional Product Sales, select the report and click *Run*.

9. Close the browser window to return to the Standard Reports tab.

Searching a Domain

As repositories increase in size, it can become difficult to quickly locate a specific item within a domain. WebFOCUS includes a search engine that can scan different components of a domain to locate particular items.

The Managed Reporting search engine allows you to search Managed Reporting for all instances of any character string within a chosen domain. A search string can consist of several words, a single word, part of a word, or any other combination of characters.

By default, searches are not case sensitive, but you can select a Match Case option to execute a case-sensitive search. Search results include instances of the search string within item descriptions at all levels of the Managed Reporting tree—within the domain name, groups, and subgroups, as well as in report names and Reporting Objects.

By default, the search engine looks for instances of the search string that occur at the same or lower level of a selected object. If you select a group folder, search results will include instances of the search string only within that group, not within the entire domain.

In the Domains view, search results apply only to a selected tab. Searches executed from within a domain in My Reports, for example, will not include results for that domain in Standard Reports. The search engine is available in the Standard Reports, My Reports, and Reporting Objects tabs, but not in the Shared Reports tab.

Note: The WebFOCUS search engine is also available in the Domain Builder.

Procedure **How to Locate an Item Using the Search Engine**

1. Access Managed Reporting.

2. Select the domain you want to search.

3. From the Domains view, select the *Standard Reports, My Reports, or Reporting Objects* tab and then select an item in the tab.

4. To access the Search dialog box, from the Domains view, click *Search*.

   The Search Within *Component* (where *Component* is the description you selected) dialog box opens:

5. Enter a search string—any combination of words or characters. Check *Match Case* if you want the search to be case sensitive.

6. Click *Find*.

   The Number Found counter in the Search dialog box displays the search results. The first instance of the string appears highlighted in the Managed Reporting tree.

7. Click *Next* to see the next instance of the search string. Click *Previous* to move to the previously displayed item.

   The Remaining counter changes to indicate how many items are left in the search. (If only one item is found, Next and Previous are disabled, and the Remaining counter displays 0.)

8. To start a new search, select the item you want to search under and click *New Search*.

9. To close the Search dialog box, click *Cancel*.

Using HTML-based Managed Reporting

Topics:

- Navigating HTML-based Managed Reporting
- Running Reports
- Filtering Data

WebFOCUS HTML-based Managed Reporting provides you with a means to quickly run Standard Reports. Since this reporting environment is HTML-based, any user, regardless of Web browser, can access Managed Reporting. To access HTML-based Managed Reporting, your Administrator designates you as an HTML user in your User Profile. Then, when you sign on to Managed Reporting, WebFOCUS uses your profile to construct your HTML-based interface. From the HTML-based Managed Reporting, you can:

- Run Standard Reports, either immediately or in deferred mode.

- Access the OLAP interface or OLAP Control Panel to manipulate data in your report.

- Apply filters to a report.

- Access Static Reports.

This chapter describes the structure of HTML-based Managed Reporting and how you navigate through it. The chapter also provides the procedures you use to run Standard and Static Reports, and references other chapters for additional information depending on your reporting needs. For information about accessing your reporting environment, see Chapter 1, *Introducing WebFOCUS Managed Reporting*.

Navigating HTML-based Managed Reporting

HTML-based Managed Reporting functions as a standard HTML page. You navigate the environment by clicking hyperlinks to display the contents of folders, or to perform functions. After you successfully sign on, WebFOCUS displays a list of domains that are available to you (the Domains list).

Each domain name is a hyperlink to the Standard Reports that constitute the domain, subdivided into group folders. Once you select a domain from the list, WebFOCUS opens the Domains Contents page.

This page displays the domain you selected at the top of the page. Below the domain are hyperlinks to the Standard Report group folders that store the Standard Reports. Clicking a Standard Report group folder name jumps you to the list of Standard Reports in the group folder. To the right of each Standard Report are the Run and Run Deferred buttons. You use the buttons to either immediately display report output (Run) or submit the Standard Report for deferred processing (Run Deferred). You use the View button to display Static Reports and launch pages.

You can sort the contents of group folders by name (the default setting), or by creation date by clicking the appropriate tab. Clicking the Back to Folders hyperlink returns you to the Domains list page. If an Administrator has prepared the customized help feature, you can access it by clicking the Domain Info button.

Use the toolbar to:

- Return to the Domains list.

- Access the Deferred Report Status Interface (to view or check the status of deferred reports).

- Logoff of WebFOCUS.

- Access Online Help.

Running Reports

The basis of your reporting environment is running reports. Your Administrator creates these reports for you to run. You use the buttons displayed on the Domains Contents page to access these reports. You can access two types of reports: Standard Reports and Static Reports. WebFOCUS displays Static Reports when you click View. When you run a Standard Report, WebFOCUS processes the report and returns the output in a new browser window.

Standard Reports

Standard Reports dynamically access data to present up-to-date information whenever you run a report. An Administrator can define filters for a Standard Report, enable OLAP (Online Analytical Processing) capability, or designate a report to run in the deferred mode only.

- **Filters** let you limit what data to display in a report. An Administrator defines filters for a report when it is developed. You simply choose to apply the predefined filters to limit data. Only data that match the selected criteria are included in your report. An intermediate HTML page will open when you run the report, allowing you to select filters to apply. For more information, see *Using Filters* on page 14-12.

- **OLAP** is a feature that allows you to view data from a variety of perspectives. Using the OLAP selections panel or OLAP Control Panel, you can add or move fields in a report, specify selection criteria, or organize your data in a hierarchy. Check your WebFOCUS Installation guide for information about browser compatibility. For more information on using OLAP, see Chapter 7, *Using OLAP Analysis*.

- **Deferred Receipt** allows you to submit a report that WebFOCUS processes in the background. Background processing enables you to continue working in Managed Reporting while WebFOCUS processes the deferred report. Once you have submitted a report, you use the Deferred Report Status Interface to view the report. For more information, see Chapter 4, *Using the Deferred Report Status Interface*.

Use the following chart to determine if your Administrator has designated one of the above features for your report.

If you see...	Then...
Measures, Graph, and Dimension controls as well as a blue colored band containing the OLAP, Run, and Reset buttons at the top or bottom of your report output.	The report is OLAP-enabled. Click *OLAP* to load the OLAP Control Panel or use the Measures, Graph, and Dimension controls to make your report choices.
An intermediate HTML page before your report output window opens.	Filters are attached to your report. Select the filters to apply by clicking the radio buttons.
Only the Run Deferred button to the right of a report in the Domains Contents page.	The report can only be Run deferred. Click *Run Deferred* to submit your report in the deferred mode.

Procedure **How to Run a Standard Report**

1. Select a domain.

If only one domain is available to you, WebFOCUS automatically opens that domain.

2. Select a Standard Report group folder.

WebFOCUS displays a list of Standard Reports.

3. To run a report immediately, click *Run*.

4. If your Administrator has defined filters for this report, an intermediate HTML page opens.

    a. Select the filters you want to apply by clicking the check boxes next to the predefined criteria.

    ⊙ Run Report
    ○ Run Graph
    Choose a Product
      ☐ Gifts
      ☐ Coffee
      ☐ Food
    Choose a Region
      ☐ West
      ☐ Midwest
      ☐ Northeast
      ☐ Southeast
    [Submit]
    [Reset]

    b. Click *Submit*.

Your report output displays in a new browser window.

For more information on filters, see *Using Filters* on page 14-12.

5. To close the report, choose *File* and select *Close*.

You return to the Domains Contents page.

Example   **Running a Standard Report**

Suppose you want to run a Standard Report containing salary information for employees in the Sales Department.

1. Find the Current Salary Report under the Sales Department group folder on the Domains Contents page.

2. Click *Run* to the right of the Standard Report name to execute the report.

   The Current Salary report opens in a separate window:

```
PAGE 1



EMP ID     LAST NAME   FIRST NAME  CURR SAL  CURR JOBCODE  EFFECT DATE
071382660  STEVENS     ALFRED      $11,000.00 A07
112847612  SMITH       MARY        $13,200.00 B14
117593129  JONES       DIANE       $18,480.00 B03                82/11/01
119265415  SMITH       RICHARD      $9,500.00 A01
119329144  BANNING     JOHN        $29,700.00 A17                83/01/01
123764317  IRVING      JOAN        $26,862.00 A15                83/03/01
126724188  ROMANS      ANTHONY     $21,120.00 B04
219984371  MCCOY       JOHN        $18,480.00 B02
326179357  BLACKWOOD   ROSEMARIE   $21,780.00 B04                82/12/01
451123478  MCKNIGHT    ROGER       $16,100.00 B02                84/09/01
543729165  GREENSPAN   MARY         $9,000.00 A07
818692173  CROSS       BARBARA     $27,062.00 A17                83/05/01
```

3. To exit, close the browser window that contains the Current Salary Report.

Procedure **How to Submit a Report for Deferred Receipt**

   1. Select a domain.

   2. Select a Standard Report group folder.

       WebFOCUS displays a list of Standard Reports.

   3. To submit a report for deferred receipt, click *Run Deferred*.

   4. If your Administrator has attached filters:

       a. An intermediate HTML page opens.

       b. Select the filters you wish to apply by clicking the check boxes to the left of the filter.

       c. Click *Submit* to complete your report.

       A new browser window opens and displays notification of successful or unsuccessful submission of the deferred request.

   5. Close the browser window displaying the notification message.

       You return to the Domains Contents page.

   6. Click *Deferred Status* on the toolbar to open the Deferred Report Status Interface. Using the Deferred Report Status Interface, you can:

       a. Check the status of your deferred report.

       b. View the output of your deferred request.

       c. Review parameters associated with this report.

   For more information on using the Deferred Report Status Interface, see Chapter 4, *Using the Deferred Report Status Interface*.

Example   **Submitting a Report for Deferred Receipt**

Suppose you want to run a report on employee training while you continue working in Managed Reporting.

1. Find the Employee Training report under the Sales Department group folder on the Domains Contents page.

    Click *Run Deferred* to the right of the Standard Report name. You may be prompted to supply a WebFOCUS Reporting Server ID. For more information, see Chapter 2, *Using Dashboard*.

2. The Deferred Report Notification window opens:

3. Close the Deferred Report Notification window to continue working in Managed Reporting.

4. When you are ready to view your report, click *Deferred Status* on the toolbar.

The Deferred Report Status Interface opens:

For more information, see Chapter 4, *Using the Deferred Report Status Interface*.

5. Find Employee Training under the Completed tab. Click *View* for Employee Training under the Options column.

The Employee Training report displays in a new browser window:

PAGE 1					
EMP_ID	LAST_NAME	FIRST_NAME	DEPARTMENT	CURR_JOBCODE	ED_HRS
071382660	STEVENS	ALFRED	PRODUCTION	A07	25.00
112847612	SMITH	MARY	MIS	B14	36.00
117593129	JONES	DIANE	MIS	B03	50.00
119265415	SMITH	RICHARD	PRODUCTION	A01	10.00
119329144	BANNING	JOHN	PRODUCTION	A17	.00
123764317	IRVING	JOAN	PRODUCTION	A15	30.00
126724188	ROMANS	ANTHONY	PRODUCTION	B04	5.00
219984371	MCCOY	JOHN	MIS	B02	.00
326179357	BLACKWOOD	ROSEMARIE	MIS	B04	75.00
451123478	MCKNIGHT	ROGER	PRODUCTION	B02	50.00
543729165	GREENSPAN	MARY	MIS	A07	25.00
818692173	CROSS	BARBARA	MIS	A17	45.00

6. Close the browser window containing the report output to return to the Domains Contents page.

HTML Launch Pages

Your Administrator may prepare an HTML launch page for you to use. A *launch page* is a complete HTML file that calls a report procedure that your Administrator has prepared. The launch page can be a simple form, containing Submit and Reset buttons, that allows you to submit the report. Some reports may prompt you to enter a value as a variable, or *parameter*, to be run with the report procedure. The launch page will then pass the parameters you have provided to the report procedure for processing. For example, the form can display default values or display lists of alternative acceptable values.

Static Reports

Your Administrator may also prepare Static Reports for you. Static Reports are hyperlinks that you click to access an HTML file. Static Reports are listed on the Domains Contents page along with Standard Reports, but can be distinguished by the View button displayed to the right of the file name in place of the Run button. To access a Static Report, click *View*.

Procedure **How to View Static Reports**

1. Select a domain.

2. Select a Standard Report group folder.

   WebFOCUS displays a list of Standard Reports.

3. Locate the Static Report and click *View* to the right of the report name.

   WebFOCUS displays the Static Report.

4. To close the Static Report, choose *File* and select *Close*.

   You return to the Domains Contents page.

Filtering Data

Filters let you decide what data to display in a report, without having to create selection criteria. An Administrator defines filters when a report is created. When you run the report, an intermediate HTML window opens and you simply select the predefined filters to limit data.

```
┌─────────────────────────────────┐
│                                 │
│   ⦿ Run Report                  │
│   ○ Run Graph                   │
│   Choose a Product              │
│      □ Gifts                    │
│      □ Coffee                   │
│      □ Food                     │
│   Choose a Region               │
│      □ West                     │
│      □ Midwest                  │
│      □ Northeast                │
│      □ Southeast                │
│   ┌─────────┐                   │
│   │ Submit  │                   │
│   └─────────┘                   │
│   ┌─────────┐                   │
│   │ Reset   │                   │
│   └─────────┘                   │
│                                 │
│                                 │
└─────────────────────────────────┘
```

The HTML page allows you to choose whether you want your output returned as a report or a graph by clicking the radio buttons at the top of the window. Filter groups are displayed as headings above each group of filter options. Choose a Product is an example of a filter group in the graphic above. You apply filters from each filter group by clicking the check boxes next to the filter name.

Data must match the criteria you select to be included in your report. You can select one filter for a simple filtering expression, or you can select multiple filters from more than one group to create complex filtering expressions.

Simple Filtering Criteria

Simple filtering criteria consist of one or more filters from the same filter group. If you select only one filter, the data must match that filter to be included in the report. If you select multiple filters from the same filter group, data must match only one filter to be included in the report.

For example, if you select the Gifts and Food filters from the Choose a Product filter group, data would only have to match one of the filters for WebFOCUS to include it in the report. Therefore, any Product sold that is in either the Gifts or Food category would satisfy the criterion for this report.

Complex Filtering Criteria

Complex filtering criteria consist of one or more filters from multiple filter groups. Data must match one filter from each filter group to be included in a report.

For example, if you select the Gifts filter from the Choose a Product filter group and the West filter from the Choose a Region filter group, data must match both criteria to be included in your report. Therefore, only data for Gifts purchased in the West would satisfy the criterion for this report.

Example   **Using Filters**

Your Administrator has supplied you with a report, Regional Product Sales, that has filters attached. To run Regional Product Sales:

1. Find Regional Product Sales under the Product Sales report group.

2. Click *Run* to the right of Regional Product Sales.

3. An intermediate HTML page opens, displaying the filters.

4. Select the Gifts filter from the Choose a Product filter group, and the West filter from the Choose a Region filter group.

5. Click *Submit* to begin processing the report.

   Notice that WebFOCUS only displays products categorized as Gifts sold in the West region.

6. Close the browser window containing Regional Product Sales to return to Managed Reporting.

   WebFOCUS displays the report in a new browser window.

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Reader Comments

In an ongoing effort to produce effective documentation, the Documentation Services staff at Information Builders welcomes any opinion you can offer regarding this manual.

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